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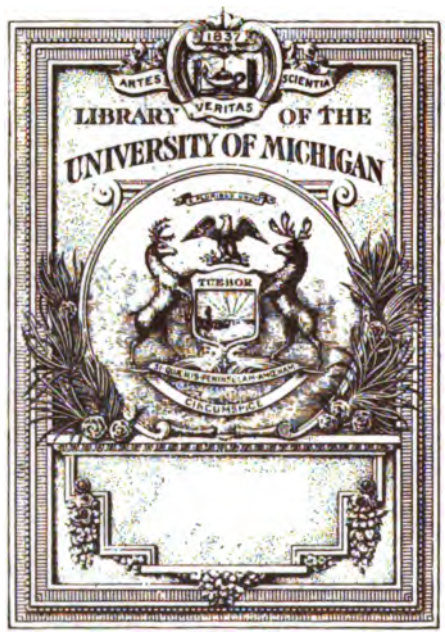

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STATE OF ILLINOIS

RIVERS AND LAKES COMMISSION

WATER RESOURCES OF ILLINOIS

BY

A. H. HORTON

Hydraulic Engineer, United States Geological Survey

WITH AN APPENDIX ON

WATER POWER AND DRAINAGE DISTRICTS OF ILLINOIS

Prepared in cooperation with the United States Geological Survey

BUREAU OF GOVERNMENT
UNIVERSITY OF MICHIGAN.

ISSUED IN ACCORDANCE WITH THE ACT OF THE GENERAL ASSEMBLY APPROVED JUNE 10, 1911

SPRINGFIELD, ILL.
1914

SPRINGFIELD, ILL.
ILLINOIS STATE JOURNAL CO., STATE PRINTERS.
1914.

STATE OF ILLINOIS

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DEPARTMENT OF THE INTERIOR

UNITED STATES GEOLOGICAL SURVEY

WATER RESOURCES BRANCH

NEWPORT, KY., July 13, 1912.

Rivers and Lakes Commission, 826 First National Bank Building, Chicago, Ill.

SIRS: There is transmitted, herewith, a report covering the results of co-operative work between the Water Resources Branch of the United States Geological Survey and the Internal Improvement, and Rivers and Lakes commissions of Illinois.

Co-operative work with the Internal Improvement Commission of Illinois was first started in January, 1908. This report covers the period from January, 1908, to December 31, 1911.

The investigations have been made in accordance with the regulations of the United States Geological Survey, under the general supervision of M. O. Leighton, Chief Hydrographer.

Since March, 1909, the work has been carried on under my direct supervision, assisted by R. J. Taylor, W. M. O'Neill, H. J. Jackson, C. T. Bailey, and P. S. Monk, junior engineers. No two of these assistants have been engaged upon the Illinois work at the same time, except for short periods.

Acknowledgements are due to these assistants for their interest and energy in connection with the execution of the work assigned to them. Especial acknowledgements are due Mr. Monk, who compiled practically all the data herein presented. I also wish to thank the members of the commission for their co-operation and interest in the work, and especially to acknowledge the assistance and unfailing courtesy of your secretary, Robert Isham Randolph.

Yours very truly,

A. H. HORTON, *District Engineer*

REPORT OF THE WATER RESOURCES INVESTIGATION IN ILLINOIS

(By A. H. Horton, District Engineer, U. S. Geological Survey)

SCOPE OF INVESTIGATIONS

The co-operative work that has been done by the Water Resources Branch of the United States Geological Survey with the Internal Improvement and the Rivers and Lakes commissions consists of the measurement of stream flow entirely. Co-operative work was first started in January, 1908, and has been continued to date. Funds have not permitted of field work during this entire period, but the gaging stations have been maintained continuously, so that most of the stations have an unbroken record of gage readings for about four years.

In order to present these data to the public in their most useful form it was decided to publish a report containing all the stream flow data that have been collected in co-operation with the State of Illinois and all other published runoff data that could be obtained. In order to make this report of the greatest benefit it was decided to include other data directly or indirectly relating to stream flow. A brief outline of the contents of the report as prepared by the Water Resources Branch of the United States Geological Survey is given below.

OUTLINE OF DATA IN REPORT

STREAM FLOW DATA

The runoff data from date of establishment to December 31, 1911, of the twenty-one stations being maintained under the co-operative arrangement are presented together with all other published runoff data available for Illinois streams. The data for some of the stations will be found to differ from that already published in the United States Geological Survey Water Supply Papers and in the report of the Internal Improvement Commission of Illinois on Surface Water, 1908-1910, on account of revising the rating curves and obtaining a better value for the drainage areas of certain stations.

Following the general description of the Mississippi and Ohio drainage basins are tabular lists of all the stations along the Mississippi, Illinois, Desplaines, and Ohio rivers. These tables show for each station, so far as possible, its location, period of record, elevation of the zero of the gage, maximum and minimum reading, and by whom maintained or published.

PRECIPITATION RECORDS

All United States Weather Bureau rainfall records of 12 months or more in length at stations in Illinois are given. Plate I is a rainfall contour map of Illinois based on the mean annual rainfall from 1881 to 1910.

EVAPORATION RECORDS

Tables of evaporation from water surfaces, compiled from observations in states subject to about the same climatological conditions as Illinois and from observations made in various parts of the United States are given, from which the evaporation from water surfaces in the State of Illinois may be closely estimated.

RIVER PROFILES

Tables of distances and elevations of the Mississippi and Ohio rivers for the portions along the State of Illinois are presented, also the distances and elevations of a number of streams within the State.

UNDEVELOPED WATER POWER

The amount of undeveloped water power within the State is estimated.

STORAGE

The possibility of building large storage reservoirs is discussed.

GAZETTEER

A gazetteer of nearly five hundred streams in the State is presented. The location of the source and mouth and the direction of the flow are given. Also the drainage area above the mouth.

DRAINAGE AREAS

Following the gazetteer is a table giving the drainage area of Illinois streams of any size. The streams are arranged under the three primary drainage basins of the State so as to show to what stream each one is tributary.

RECOMMENDATIONS FOR FUTURE WORK

1. (a) At present there are about twenty-one gaging stations being maintained in Illinois under the co-operative arrangement. These stations are on streams located in the central and southern part of the State. The data are primarily of use in studying drainage and flood control problems. These stations should be continued for a number of years longer, for the value of records of runoff increases directly as their length. Other stations should be established on streams where drainage and flood control are needed.

(b) Gaging stations should be established on those streams in the northern part of the State on which there are water power possibilities.

(c) One or two stations should be established on the Desplaines and Illinois rivers so as to have records of the flow of these two streams.

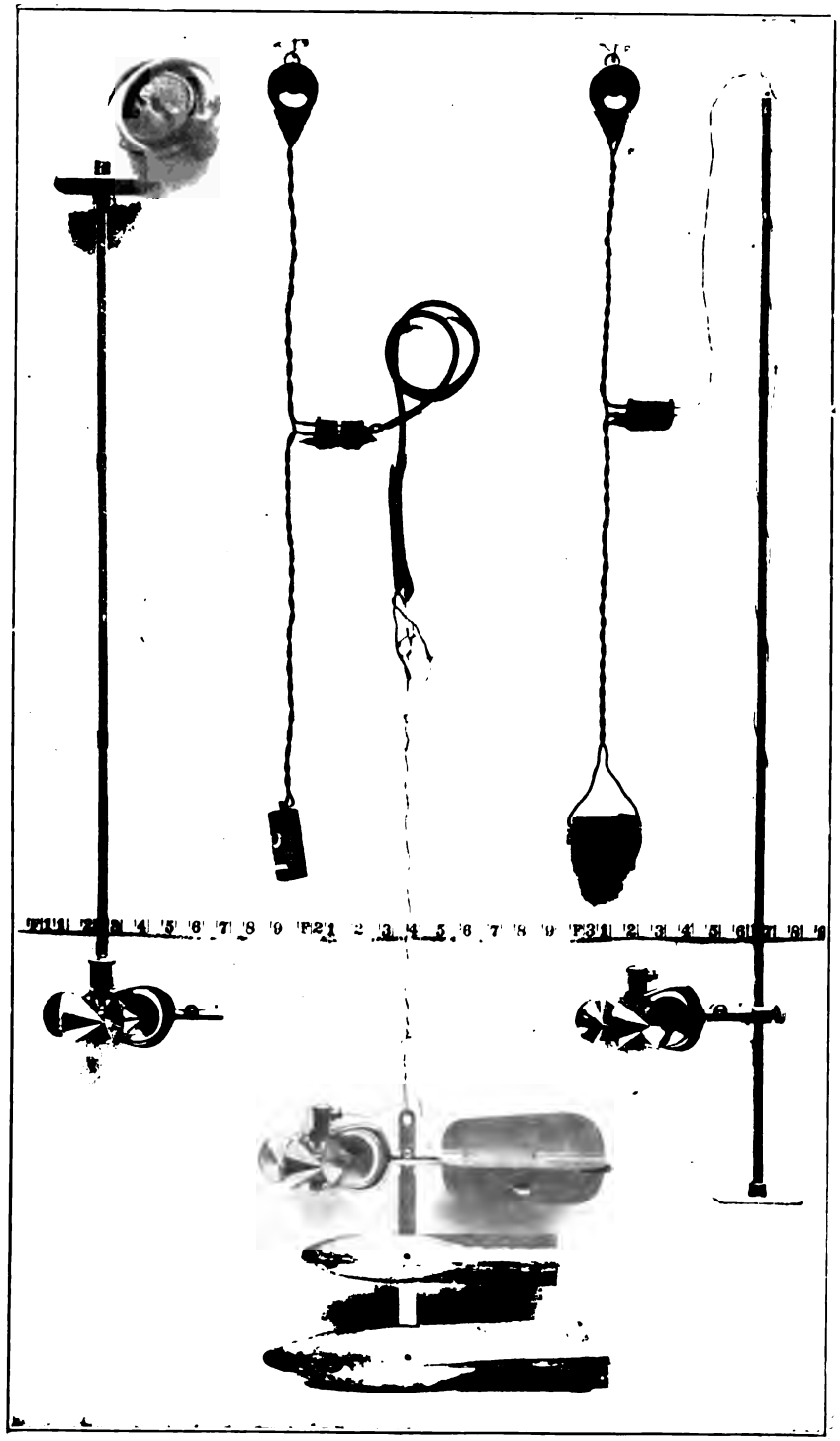
2. There are no available records of evaporation at any place in the State. Observations of evaporation should be made in the northern, central, and southern sections of the State.

3. Profile surveys of those streams where drainage work is in progress or being contemplated should be made.

ACKNOWLEDGMENTS

In addition to the stream flow data obtained co-operatively, use has been made of stream flow records compiled by the United States Geological Survey in previous years.

Special acknowledgements are due the United States Weather Bureau for rainfall data; the United States Army Engineers for river profiles, data with reference to gages, and other information; the Office of Experiment Stations, United States Department of Agriculture, and the Topographic Branch of the United States Geological Survey for river profiles; J. A. Harman for data about the Kaskaskia River, and the East Side Levee and Sanitary District for runoff data of Cahokia Creek.



Small price current meters

PART I, STREAM FLOW DATA

STREAM FLOW DATA

The work of compiling data relative to the available water supply has been carried on in accordance with the methods of the United States Geological Survey which have become standardized during the period of twenty years or more that the work has been carried on in various parts of the United States.

In the performance of this work the endeavor is to approach as nearly as possible the highest degree of precision which a rational expenditure of time and a judicious expenditure of a small amount of money will allow. In all engineering work there is a point of refinement beyond which it is needless and wasteful to proceed, and this principle applies with especial force to stream-flow measurements. It is believed that the stream-flow data presented in this report are sufficiently accurate for all practical purposes. The data most liable to be in error for various causes are the estimates of runoff for low-water periods and the data for these periods should be used with care and caution.

METHODS OF MEASURING STREAM FLOW

There are three distinct methods of determining the flow in rivers: (1) By measurements of slope and cross section and the use of Chézy's and Kutter's formula; (2) by means of a weir or dam; (3) by measurements of the velocity of the current and the area of the cross section. The first method is the least satisfactory and is rarely used by the Geological Survey. The second method is not suited to the majority of dams owing to leakage through the dam, intermittent use of flashboards, uncertainty regarding co-efficient, uneven crest, and other reasons, and accordingly is not much utilized.

The third method, that of measuring the velocity of the current and the area of the cross section of a stream, is the one that is generally used. In the selection of the gaging stations, care has been taken to locate them, so far as possible, at points where the relation between gage height and discharge remains constant for a given stage.

A gaging station consists essentially of a gage for determining the daily fluctuations of stage of the river, and some structure or apparatus from which discharge measurements are made, usually a bridge or cable. The measurements of discharge are made by means of an electric current meter (Plate II). (For details of making the measurements the reader is referred to the annual stream-gaging reports of the United States Geological Survey.) A number of discharge measurements are

made at different stages of the river, so chosen that they will cover the range between high and low water as far as possible. These measurements are plotted on cross-section paper with the gage heights as ordinates and the discharge as abscissas. Through the points thus plotted it is possible to draw a smooth curve which is called the rating curve (Plate III). From this curve there is made a rating table showing the discharge for each gage height. The daily discharge is then obtained by applying the rating table to the mean daily gage heights furnished by the observer.

ACCURACY AND RELIABILITY OF RECORDS

Practically all discharge measurements made under fair conditions are well within 5 per cent of the true discharge at the time of observation. Inasmuch as the errors of meter measurements are largely compensating, the mean rating curve, when well developed, is more accurate than the individual measurements.

The work is, of course, dependent upon the reliability of the observers, and in the case of controlled flow, upon the time of observations. With relatively few exceptions the observers perform their work honestly. Care is taken, however, to watch them closely and to inquire into any discrepancies. In general in Illinois, observations are taken once a day, the single reading being considered the mean for that day.

In order to give engineers and others information regarding the probable accuracy of the computed results, footnotes are added to the tabulated data, and an accuracy column is inserted in the monthly discharge table.

The accuracy column does not apply to the maximum or minimum or to any individual day, but to the monthly mean. It is based on the accuracy of the rating, the probable reliability of the observer, and knowledge of local conditions.

In this column, A indicates that the mean monthly flow is probably accurate within 5 per cent; B, within 10 per cent; C, within 15 per cent; D, within 25 per cent. Special conditions are covered by footnotes.

ARRANGEMENT OF DATA

The rivers of the State are divided into three drainage basins; (1) Mississippi River basin, which is by far the largest as it comprises nearly 80 per cent of the entire State; (2) Ohio River basin; (3) Lake Michigan drainage basin. Practically all of the Lake Michigan drainage basin in Illinois will be delivered to the Mississippi River basin upon completion of work in process of construction by the Chicago Sanitary District.

The order of treatment of stations in any basin is down stream. After all stations from the source to the mouth of the main stem of the river have been given, the tributaries are taken up in regular order from source to mouth.

For each drainage basin there is given a brief description of general conditions, covering such features as area, source, tributaries, topography, geology, etc. For each gaging station there are given the

following data, so far as possible: Description of station, list of discharge measurements, table of daily gage heights, rating table, table of daily discharge, and table of monthly discharge for each year that the station has been maintained.

UPPER MISSISSIPPI RIVER DRAINAGE BASIN

GENERAL FEATURES

Mississippi River drains the greater part of the territory of the United States lying between the Allegheny and the Rocky Mountains. Its basin, irregular in shape, occupies the central part of the United States, and is best described as an oblong, with the major axis, 1,700 miles in length, running southeastward from the northwestern part of Montana, through North Dakota, Nebraska, Missouri, and Tennessee, into the northwestern corner of Alabama. On each side of this line the basin spreads out from 300 to 500 miles, and on the east is a large proturberance from the general outline extending to the Alleghenies. The basin comprises about 1,240,000 square miles, and includes wholly or in part 30 states, besides a small area in the Dominion of Canada. Of the total area, about 527,000 square miles drain to the Missouri, about 171,500 square miles to the upper Mississippi above the mouth of the Missouri, and about 204,000 square miles to the Ohio, leaving a balance of 337,500 square miles for the area between the mouths of the Missouri and Ohio and the area below the Ohio. The mean annual flow of the Missouri is about 100,000 second-feet; of the upper Mississippi, about 125,000 second-feet; of the Ohio, about 300,000 second-feet.

Immediately beneath the covering of drift at the sources of the Mississippi lie the oldest rocks known to the geologist. Its mouth is surrounded by the soft deposits of its own delta now forming. Between these two extremes rocks of all geologic ages are represented.

All varieties of topography are likewise exhibited in the drainage basin, mountain and prairie, arid plain, and alluvial bottom covered with vegetation, being fully represented; but the greater part of its broad extent is very uniform in contour.

For convenience in publication the basin of Mississippi River has been divided into the upper Mississippi, Missouri River, lower Mississippi, and Ohio drainage basins. The upper Mississippi basin, as considered in this discussion, is that portion lying above the mouth of the Missouri, and that portion in Illinois between the mouth of the Missouri and the mouth of the Ohio. The upper Mississippi basin therefore occupies the north-central part of the United States, including Minnesota, Wisconsin, Iowa, Illinois, Indiana, Missouri, and a few square miles in South Dakota and the northern peninsula of Michigan. The sources of this branch of the great river are almost exactly in the center of the continent on an east and west line.

The Mississippi rises, not in Lake Itasca, long considered the source, but in a smaller lake called Hernando de Soto, which is situated

in the northeastern part of Becker County, Minnesota, and which drains into Lake Itasca through Nicollet Creek. From these lakes to the mouth of Crow Wing River it flows almost in a circle; at this point it is only 75 miles from its sources, while the distance following the river is 350 miles. Leaving the lakes its course is northward, but below the junction with the Crow Wing it turns to the south and continues in this direction until it finally reaches the Gulf of Mexico.

The total length of the river is about 2,555 miles; from the source to the mouth of the Ohio is about 1,500 miles.

The important tributaries of the upper Mississippi, beginning at the source and following down the west bank, are Leech Lake, Willow, Pine, Crow Wing, Sauk, Crow, Minnesota, Cannon, Zumbro, Root, Turkey, Wapsipinicon, Iowa, Des Moines, and Missouri rivers; on the east bank are Prairie, Elk, Rum, St. Croix, Chippewa, Black, LaCrosse, Wisconsin, Rock, Illinois, Kaskaskia, Big Muddy, and Ohio rivers.

From Lake Hernando de Soto to the Falls of St. Anthony the river flows almost exclusively through a drift-covered region. At the Falls of St. Anthony the river pitches down a vertical fall and rapids amounting to 80 feet in half a mile, and in so doing leaves the prairie and clay banks for a channel that lies between rocky bluffs of limestone and sandstone, which continue for many miles down the river, gradually increasing to a height of 500 feet as the bed sinks below the general prairie level.

Minnesota River enters the Mississippi about 16 miles below St. Anthony Falls, and below its mouth the width of the main stream averages 1,000 feet. From this point to the mouth of the Ohio it is a broad, placid stream, containing innumerable islands, the entire width of the valley averaging 1 mile. In many places, especially where tributaries enter, fertile flats lie between the river and the bluffs. Fifty-five miles below the mouth of the Minnesota is Lake Pepin, an expansion of the river apparently caused by the immense quantities of sand brought down by the Chippewa. At two places exceptions occur to the otherwise placid character of the river. At Rock Island, Ill., 511 miles above Cairo, there are rapids by which the river falls about 20 feet in 12 miles; and at Keokuk, Iowa, 383 miles above Cairo, is the foot of the Des Moines Rapids, where in a distance of 11 miles the river falls about 22 feet.

For a table of elevations along the State of Illinois see tables of profiles.

The headwaters of the main stream and its tributaries which lie in Wisconsin and in Minnesota north of a line drawn diagonally through Douglas, Stevens, Meeker, McLeod, Sibley, Lesueur, Rice, and Dakota counties are in a region that was originally forested. Most of this area has been cut over extensively, and a comparatively small proportion has been cleared except in the southern part of the area where agriculture is making rapid strides. The remainder of the drainage area is prairie land.

The soil of practically the entire basin of the upper Mississippi has been formed by the melting of the glaciers that once covered the northern part of the United States. The glacial deposit is of varying

thickness, being thinnest at the southern part of the basin and increasing in thickness towards the northern parts of the area.

The winters in Wisconsin, Minnesota, and Iowa are severe; snowfall is heavy throughout the greater part of this area, the snow lasts for considerable periods; ice forms to thickness of one to two feet, and lasts for three to four months. In the northern part of Illinois the winters are rather severe; the snowfall averages about 30 inches and the mean annual temperature is about 49°, the lowest winter temperature being 32° below zero. In the southern part the winters are much milder; average snowfall is about 16 inches and the mean annual temperature is 56°, with the lowest winter temperature 16° in the extreme southern end of the State. The rainfall varies from 34 inches in the northern part to 40 inches in the southern part.

According to some authorities the basin of the upper Mississippi contains from 5,000 to 6,000 lakes, nearly all of which are near the sources of the main river and its northern tributaries. In addition there are vast swamp areas in this region, so that there is great natural storage for steadying the flow of the river. This swamp land is beginning to be drained at the present time. By building comparatively low dams it is possible to create reservoirs on many of the lakes.

The river is navigable as far up as St. Anthony Falls, and above that there are navigable stretches.

The Army Engineer Corps has built five reservoirs on the Mississippi headwaters for the purpose of aiding navigation during the low water open season. These reservoirs have the following storage capacity:

	Feet head	Cubic feet
Winnibigoshish	14	44,000,000,000
Leech Lake	5.7	33,000,000,000
Pokegama Lake	7.5	5,300,000,000
Sandy Lake	9.4	3,200,000,000
Pine River dam	16.2	7,700,000,000

Although the reservoirs are operated primarily in the interest of navigation, water power and flood control are also benefited. The operation during the winter, or nonnavigation season, is based on the necessity for having 39,000,000,000 cubic feet empty storage capacity on April 1 to take care of the spring high water. Thus if the preceding year has been very dry and the storage has been nearly exhausted, the reservoirs allow only the normal minimum winter flow (as determined previous to building the reservoirs) to pass down the river. If the preceding navigation season has not drawn heavily on the reservoirs, the winter flow is increased by a sufficient amount to make possible the required empty storage capacity April 1.

The length of the Mississippi along the western boundary of Illinois is 615 miles. In this stretch of the river water power is developed at two places: at Rock Island, Ill., 511 miles above Cairo, where about 10,000 horse-power is developed, but only about 4,000 horsepower are used; and at Keokuk, Iowa, 383 miles above Cairo, where there is in course of construction a concrete dam across the river, 4,700

feet long and 37 feet high. The ultimate power that will be developed is said to be 200,000 horse-power. This plant is to be completed early in 1914.

The drainage area of the Mississippi River within the State of Illinois is 44,050 square miles.

The following list includes the gaging stations on that portion of the river which forms the western boundary of the State, and stations on the Illinois and Desplaines rivers, maintained by the Mississippi River Commission, United States Army Engineers, and by the United States Weather Bureau. Information with reference to these stations may be obtained upon application to the different bureaus named.

Following the above list is a list of the gaging stations, data for which are published in this report.

MISSISSIPPI RIVER

Station	Distance above mouth of Ohio River	Period covered by record—years	Elevation of zero of gage above mean sea level	Maximum gage reading	Minimum gage reading	Maintained or published by—
	Miles		*Feet*	*Feet*	*Feet*	
Dubuque, Iowa	601	1873-1911	585.6	21.7	—0.6	U. S. Weather Bureau.
Mouth of Galena River	552	1894-1911	.....	21.1	.....	U. S. Army Engineers.
Sabula, Iowa	557	1893-1911	.....	19.5	.....	do.
Clinton, Iowa	539	1893-1911	566.6	20.5	0.0	U. S. Weather Bureau.
Leclaire, Iowa	518	1873-1911	563.2	14.5	—1.2	U. S. Weather Bureau[1].
Rock Island, Ill., Davenport, Iowa	503	1873-1911	542.5	19.4	—1.2	do.
Mouth of Rock River	501	1896-1911	.....	16.0	0.5	U. S. Weather Bureau.
Muscatine, Iowa	476	? -1911	530.8	18.3	—1.1	do.
Keithsburg, Ill	449	1892-1911	.....	*14.9	*—0.3	U. S. Engineers.
Burlington, Iowa	424	1878-1911	510.8	17.6	—1.2	do.
Fort Madison, Iowa	403	1893-1911	.....	*16.5	*—0.3	do.
Galland, Iowa	402	? -1911	497.0	12.0	—2.1	U. S. Weather Bureau[1].
Keokuk, Iowa	382	1873-1911	477.8	21.0	—2.1	do.
Warsaw, Ill	378	1904-1911 previous to 1899	475.1	22.1	0.0	do.
Quincy, Ill	344	1910-1911, previous to 1894	456.8	22.6	—1.9	do.
Hannibal, Mo	326	1878-1911	449.7	22.5	—1.8	do.
Louisiana, Iowa	298	1878-1911	.....	*20.8	*0.0	U. S. Engineers.
Grafton, Ill	231	1880-1911	404.4	37.8	—0.3	U. S. Weather Bureau.
Alton, Ill	215	1891-1911	.....	*31.4	*0.2	U. S. Engineers.
Chain of Rocks, St. Louis, Mo	193	April-November, 1892; April 1893-1911	314.4	110.6	72.8	do.
Bissell Point, St. Louis, Mo	187	June, 1880-December, 1884; April, 1887-1911	313.6	108.3	66.2	do.
St. Louis, Mo	182	1861-1911	380.3	41.4	—2.5	Mississippi River Commission.
Jefferson Barracks, Mo.	172	1891-1908	378.0	32.8	—0.1	U. S. Engineers.
Waters Point, Mo	160	1891-1911	370.7	33.6	—0.8	do.
Cornice Rock, Mo	149	1891-1904	.....	33.1	—3.0	do.
St. Nicholas Rock, Mo.	148	1905-1909	214.0	177.3	154.0	do.
Brickeys Mill, Mo	137	1891-1900; 1904-1908	358.0	32.9	—1.1	do.
Little Rock Landing, Mo	126	1894-1911	214.0	169.4	135.1	do.
East Kaskaskia, Ill	116	1893-1908	344.0	35.3	—3.6	do.
Chester, Ill	109	1891-1911	341.4	33.4	—4.0	U. S. Weather Bureau[1].
Bishop Landing	100	1892-1902 (not continuous)	.....	155.8	119.1	U. S. Engineers.
Red Rock, Mo	93	November, 1896-January, 1897; November, 1897-February, 1908	329.0	38.6	‡0.0	do.
Grand Tower, Ill	79	1891-1911	322.2	33.8	1.1	do.
Moccasin Springs, Mo.	66	1896-1908	314.0	33.9	‡1.7	do.
Cape Girardeau, Mo.	52	1904-1911; previous to 1894	305.1	36.5	0.6	U. S. Weather Bureau[1].
Grays Point, Mo	45	1880-1911	301.3	35.4	0.2	Mississippi River Commission.
Commerce, Mo	39	1896-1911	302.0	29.4	—1.8	U. S. Engineers.

MISSISSIPPI RIVER—*Concluded*

Station	Distance above mouth of Ohio River	Period covered by record—years	Elevation of zero of gage above mean sea level	Maximum gage reading	Minimum gage reading	Maintained or published by—
	Miles		*Feet*	*Feet*	*Feet*	
Hacker Towhead, Ill...	26	1904–1908.....	214.0	110.5	81.7	U. S. Engineers.....
Thompson Land'g, Mo.	19	1896–1904.....	.....	35.8	1.3	..do.....
Beech Ridge, Ill.....	13	1901–1911 (not continuous) .	282.9	39.2	0.1	..do.....
Birds Point, Mo.....	2	1901–1908.....	.....	49.2	2.2	..do.....

[1] Gage belongs to U. S. Engineers.
[2] Gage belongs to Mississippi River Commission.
* Maximum and minimum for "navigable season" only.
‡ Doubtful on account of ice.

ILLINOIS RIVER

Station	Miles above U. S. Engineers gage at Grafton, Ill.	Period covered by record	Elevation of zero of gage above mean sea level	Maximum gage reading	Minimum gage reading	Maintained or published by—
		Years	*Feet*	*Feet*	*Feet*	
Morris, Ill.....	264.0	1893–98.....	480.8	25.5	.....	U. S. Engineers.....
Morris, Ill.....	264.0	1899–1900; 1903–04.....	479.4	.....	.....	..do.....
Seneca, Ill.....	252.9	1900.....	477.7	22.6	.....	..do.....
Three miles above Marseilles, Ill.....	250.3	1900.....	480.4	14.4	.....	..do.....
Marseilles, Ill., above dam.....	247.3	1883; 1899; 1898–1900.....	477.5	.....	.....	Marseilles Water Power Co.....
Douglas Farm.....	244.0	1900.....	455.7	.....	.....	U. S. Engineers.....
Fleming Farm.....	243.0	1900.....	455.8	.....	.....	..do.....
Ottawa, Ill., above Fox River.....	240.0	1899.....	.....	.....	.....	..do.....
Ottawa, Ill., wagon bridge.....	239.8	1900–1911.....	450.9	22.0	.....	Northern Illinois Light & Traction Co.....
Ottawa, Ill., between bridges.....	239.7	1883.....	447.9	25.0	.....	U. S. Engineers.....
LaSalle County Farm..	236.2	1900.....	447.1	17.3	.....	..do.....
Lock 15, Ill. and Michigan Canal, LaSalle...	223.2	1867–77; 1883; 1893–1904.....	427.6	.....	.....	Illinois Canal Commission.....
Lock 15, Ill. and Michigan Canal, LaSalle...	223.2	1905–11.....	435.0	28.8	0.0	U. S. Weather Bureau.
Peru, Ill.....	222.2	1899.....	436.2	22.1	.....	U. S. Engineers.....
Peru, Ill.....	222.2	1911.....	436.6	.....	.....	City of Peru.....
Lock No. 1, Ill. and Mississippi Canal.....	210.5	1903–04.....	439.8	.....	.....	U. S. Engineers.....
Henry, Ill., above dam.	196.1	1871–1911.....	437.0	.....	0.8	Illinois Canal Commission.....
Henry, Ill., below dam	196.1	1871–1911.....	429.8	.....	2.5	..do.....
Henry, Ill.....	196.1	1869–70.....	430.2	.....	.....	..do.....
Lacon, Ill.....	189.2	1903–04.....	435.2	.....	.....	U. S. Engineers.....
Chillicothe, Ill.....	180.5	1903–04.....	429.8	21.6	.....	..do.....
Peoria, Ill., upper bridge.....	166.1	1894–1911.....	406.0	48.9	.....	Peoria Water Works...
Peoria, lower bridge...	162.3	1867–78; 1884–1911.....	429.1	24.2	2.6	U. S. Weather Bureau..
Pekin, Ill.....	152.9	1892; 1898–1904.....	431.8	22.5	.....	U. S. Engineers.....
Kingston Mines.....	145.0	1903–04.....	427.6	19.5	.....	..do.....
Copperas Creek Lock, upper gage.....	136.8	1877–1911.....	425.9	20.2	6.0	..do.....
Copperas Creek Lock, lower gage.....	136.8	1873–1911.....	421.0	19.0	5.0	..do.....
Liverpool, Ill.....	128.0	1903.....	431.0	14.1	.....	..do.....

ILLINOIS RIVER—*Concluded*

Station	Miles above U. S. Engineers' gage at Grafton, Ill.	Period covered by record	Elevation of zero of gage above mean sea level	Maximum gage reading	Minimum gage reading	Maintained or published by—
		Years	*Feet*	*Feet*	*Feet*	
Havana, Ill.	120.0	1878–81; 1896–1911	424.5	22.4	2.3	City of Havana
Bath, Ill.	112.0	1878–79	423.1			U. S. Engineers
Holmes Landing	108.6	1903	432.6			do
Sharps Landing	102.8	1878–80	422.7			do
Browning, Ill.	97.5	1903	430.0			do
Beardstown, Ill.	88.5	1878–81; 1884–1911	420.2	22.5	0.0	U. S. Weather Bureau
LaGrange Lock, upper gage	77.6	1889–1911	411.4	28.2	14.9	U. S. Engineers
LaGrange Lock, lower gage	77.6	1882–1911	411.4	28.2	6.9	do
Meredosia, Ill.	71.4	1878–81; 1884–1911	417.4	24.3		Wabash R. R. Co.
Valley City, Ill.	61.5	1878–80; 1893–1911	415.0	21.0	2.4	do
Pearl, Ill.	43.1	1878–81; 1885–1911	412.9	26.5		C. & A. Ry. Co.
Kampsville, Ill., above dam	32.0	1893–1911	409.1	31.2	14.3	U. S. Engineers
Kampsville, Ill., below dam	32.0	1878–83; 1887–1911	409.1	31.2	6.3	do
Columbiana, Ill.	32.0	1878–80	409.7			do
Hardin, Ill.	21.1	1878–80	407.8	26.3		do
Deerplain, Ill.	8.4	1878–80	406.6			do
Grafton, Ill.	0.0	1879–92; 1894–1911	404.1	33.2	−0.8	U. S. Engineers; U. S. Weather Bureau

DESPLAINES RIVER

Station.	Miles above mouth	Period covered by record	Elevation of zero of gage above mean sea level	Maximum gage reading	Minimum gage reading	Maintained or published by—
		Years	*Feet*	*Ft.*	*Ft.*	
Desplaines, Ill.	59.5	1887–98	581.2			Chicago Sanitary Commission
Riverside, Ill.	41.0	1886–94	581.2			do
Willow Springs, Ill.	35.0	1890–98	580.7			do
Lockport, Ill.	20.0	1900–04	580.2			U. S. Engineers
Joliet, Ill., Lock No. 5, Ill. and Michigan Canal	16.0	*1893–1904	531.4			Illinois Canal Commissioners.
Joliet, Ill., above dam No. 1.	15.8	1892–97	537.0			Chicago Sanitary Commission
Joliet, Ill., above power dam	15.0	1901–1911	537.8			Economy Light & Power Co.
Joliet, Ill., below power dam	15.0	1903–1911	537.8			do
Joliet, Ill., below Adams dam	14.0	1883	513.8			U. S. Engineers
Head of Treat's Island	7.0	1883	502.7			do
Foot of Treat's Island	6.4	1883	493.6			do
Below mouth of Jackson Creek	5.0	1899–1900; 1903–04	492.3			do
Kankakee Feeder Aqueduct	1.0	1904	580.6			do

*For "investigation period" only.

LIST OF GAGING STATIONS IN THE MISSISSIPPI RIVER DRAINAGE BASIN IN ILLINOIS, DATA FROM WHICH ARE PUBLISHED IN THIS REPORT

Rock River at Rockton (above Pecatonica River), 1903.
Rock River at Rockton (below Pecatonica River), 1903-1909.
Rock River at Nelson, 1906.
Rock River at Sterling, 1905-1906.
Illinois River near Minooka, 1903-1904.

Illinois River near Seneca, 1903.
Illinois River at Ottawa, 1903-1904.
Illinois River at LaSalle, 1903.
Illinois River at Peoria, 1903-1906.
Kankakee River at Momence, 1905-1906.
Desplaines River at Riverside, 1886-1898.
Desplaines River near Channahon (above Jackson Creek), 1903-1906.
Desplaines River near Channahon (above Kankakee River), 1903.
Fox River at Sheridan, 1905-1906.
Fox River at Ottawa, 1903.
Sangamon River near Monticello, 1908-1911.
Sangamon River at Decatur, 1905.
Sangamon River at Riverton, 1908-1911.
Sangamon River near Springfield, 1903.
Sangamon River near Oakford, 1909-1911.
Sangamon River near Chandlerville, 1908.
South Fork of Sangamon River near Taylorville, 1908-1911.
Salt Creek near Kenney, 1908-1911.
Cahokia Creek near Poag, 1909-1911.
Kaskaskia River near Arcola, 1908-1911.
Kaskaskia River at Shelbyville, 1908-1911.
Kaskaskia River at Vandalia, 1908-1911.
Kaskaskia River at Carlyle, 1908-1911.
Kaskaskia River at New Athens, 1907-1911.
Shoal Creek near Breese, 1909-1911.
Silver Creek near Lebanon, 1908-1911.
Big Muddy River near Cambon, 1908-1911.
Beaucoup Creek near Pinckneyville, 1908-1911.

ROCK RIVER DRAINAGE BASIN

GENERAL FEATURES

The drainage basin of Rock River lies in the southeastern part of Wisconsin and in the northwestern part of Illinois. The river rises in the southeastern part of Fond du Lac County in Wisconsin, flows in a slight southwesterly direction across the Illinois State line, and at Rockford, Ill., turns more to the southwest and joins Mississippi River about 6 miles below the city of Rock Island, Ill. The total length of the river is about 286 miles. The total drainage area is about 10,820 square miles, of which 5,510 square miles are in Wisconsin and about 5,310 square miles in Illinois.

The more important tributaries, beginning at the source of Rock River, are East Branch of Rock River, Oconomowoc, Bark, Turtle Creek, Kiskaukee, Kyte, and Green rivers on the left or east bank; and West Branch of Rock River, Crawfish, Catfish, and Pecatonica rivers, and Rock Creek on the right or west bank.

The drainage basin is irregular in shape, being about 175 miles in length, and about 85 miles in greatest width. In the upper part of

its course the river flows rather toward the eastern side of the basin, at the Illinois State line it approaches the center, and in its lower course it flows decidedly near the western boundary. The rocks underlying this basin are limestones and shales, which have been in large part covered by the drift and morainic débris of glacial times, and the soils vary with the geologic formations on which they rest.

The topography in the Illinois portion of the drainage area is an undulating, semiprairie region; in Wisconsin the surface is moderately hilly, elevations ranging from 750 feet where the river enters the State of Illinois to 1,100 feet on the crests of the Kettle Range. The rise from the interior of the valley is gradual, and few of the hill tops are more than 100 feet above the intervening valleys. The low, uneven topography has led to the formation of an intricate tributary system with numerous spring-fed lakes. These lakes occur chiefly in an eastern and western group, the eastern comprising about 20 lakes with an aggregate area of 11 square miles, and the western including 5 lakes with a total area of 13 square miles. The elevation of the source of the river is approximately 1,000 feet above sea level; at Horicon the elevation is 858 feet; at the State line it is 731 feet, and at the mouth of the river 540 feet. The average slope is a little over 1 foot per mile.

The forested area, according to L. S. Smith, of Madison, Wis., is about 30 per cent in that part of the drainage area in Wisconsin. The forested area in Illinois is probably less than in Wisconsin, as the State has been longer settled.

The mean annual rainfall is about 35 inches. The winters in the northern part of this drainage area are comparatively severe, snowfall is heavy, and ice forms a foot or more in thickness on the streams. In the lower part of the drainage basin the winters are somewhat milder.

The basin affords good opportunities for storage, but the value of the land that would be flooded by reservoirs prohibits their construction. Lake Koshkoning, an expansion of Rock River, 23 square miles in extent, is the only body of water now controlled in the interests of manufacturing.

Although the average slope of Rock River is small, sites for water power are numerous, as in general good foundations for dams may be found. A great many of the power sites are fully or partly developed, but there are still undeveloped power sites on the main stream and its tributaries. The power sites on the tributaries, with few exceptions, have small fall, and many developed sites have been abandoned because of the greater value of the submerged land for farms.

ROCK RIVER ABOVE MOUTH OF PECATONICA RIVER AT ROCKTON, ILLINOIS

Location.—At the highway bridge about three-fourths mile above the mouth of Pecatonica River, about one mile from Rockton, Ill., and about one-half mile below the dam at Rockton.

Records available.—May 13, 1903, to August 18, 1903.

Drainage area.—Three thousand six hundred and eighty square miles.

Gage.—Standard chain gage attached to downstream side of left span of bridge. Datum has remained unchanged since establishment.

Channel.—Bed is of gravel; bridge is at an angle to thread of current.

Discharge measurements.—Made from bridge.

Floods.—No record of floods is available.

Regulation.—A canal for power purposes diverts a large amount of flow around the station.

Accuracy.—Considerable backwater effect from Pecatonica River was experienced, and this, together with the large diversion, caused the situation to be discontinued.

DISCHARGE MEASUREMENTS OF ROCK RIVER ABOVE MOUTH OF PECATONICA RIVER, AT ROCKTON, ILLINOIS, IN 1903

Date	Hydrographer	Gage height	Discharge
1903		*Feet*	*Second-feet*
May 13	L. R. Stockman	3.90	950
July 2	L. R. Stockman	3.00	223

MEAN DAILY GAGE HEIGHT, IN FEET, OF ROCK RIVER ABOVE MOUTH OF PECATONICA RIVER AT ROCKTON, ILLINOIS, FOR 1903

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1							2.50	5.30				
2							2.80	5.20				
3							2.20	5.10				
4							3.10	4.90				
5							3.50	4.90				
6							3.90	4.70				
7							4.10	4.70				
8							4.20	4.80				
9							4.30	4.20				
10							4.50	4.40				
11							4.70	4.10				
12							5.20	4.10				
13							5.20	4.00				
14							4.80	3.90				
15							4.70	3.90				
16							4.60	4.90				
17							4.50	4.70				
18							5.60	4.60				
19							6.80					
20							6.70					
21						3.40	6.90					
22						2.90	7.40					
23						3.20	7.70					
24						2.80	7.60					
25						2.80	7.50					
26						2.90	6.70					
27						2.90	6.40					
28						3.30	6.20					
29						3.20	5.90					
30						2.50	5.60					
31							5.40					

ROCK RIVER BELOW MOUTH OF PECATONICA RIVER AT ROCKTON, ILLINOIS

Location.—At highway bridge one mile below the dam and three-fourths mile below the mouth of Pecatonica River.

Records available.—May 13, 1903 ,to July 20, 1906; October 1, 1906, to March 31, 1909.

Drainage area.—Six thousand two hundred and ninety square miles.

Gage.—Standard chain gage attached to the downstream side of the first span from the left end of bridge.

Datum.—The datum was changed October 1, 1906, so that the gage readings since that date read 1.0 foot less than they would by the former datum.

Channel.—Permanent; bed composed of gravel and small rocks; broken by four piers.

Discharge measurements.—Made from upstream side of 5-span bridge.

Floods.—The highest recorded stage during the period when the gage was in operation was 13.23 feet by the old datum. No other records of floods are available.

Winter flow.—The winters in this vicinity are comparatively severe; ice forms on the river but open places generally exist at the section. Ice jams are frequent below the station and cause backwater at the gage.

Regulation.—The dam and power plant above the station may modify the flow during periods of low water.

Accuracy.—Since the amount of the change in datum on October 1, 1906, is only approximately known, the estimates since that date are liable to some error. It is believed, however, that errors from this cause are small.

There is a small amount of water diverted around this station for one or two small power plants.

DISCHARGE MEASUREMENTS OF ROCK RIVER BELOW MOUTH OF PECATONICA RIVER, AT ROCKTON, ILLINOIS, 1903–09

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1903		*Feet*	*Sq. feet*	*Feet*	*Sec.-feet*
May 13	L. R. Stockman	.....	.....	2.90	2,522
June 30	A. C. Lootz	296	547	2.30	1,501
August 18	L. R. Stockman	490	1,352	4.07	4,611
September 4	F. W. Hanna	.....	1,352	4.08	4,607
October 9	F. W. Hanna	504	1,998	5.35	7,464
*November 9	F. W. Hanna	453	831	2.85	2,874
†December 10	F. W. Hanna	367	743	2.60	2,384
1904					
†January 16	F. W. Hanna	380	662	2.90	1,487
March 14	F. W. Hanna	509	4,081	9.30	11,180
March 25	F. W. Hanna	509	5,744	12.32	24,910
April 18	F. W. Hanna	504	2,361	5.91	9,212
June 23	F. W. Hanna	378	660	2.50	2,099
July 7	F. W. Hanna	389	645	2.38	1,889
August 30	F. W. Hanna	381	674	2.45	2,034
September 23	F. W. Hanna	408	739	2.65	2,355
October 26	F. W. Hanna	426	759	2.70	2,372
November 9	F. W. Hanna	397	695	2.50	2,149
1905					
March 23	Brennan and Hanna	516	4,650	10.37	17,770
April 29	M. S. Brennan	503	1,524	4.42	5,361
June 29	M. S. Brennan	503	1,530	4.44	5,152
August 28	M. S. Brennan	482	1,012	3.20	3,324
September 15	M. S. Brennan	460	860	2.88	2,783
1906					
§January 31	M. S. Brennan	503	2,390	5.79	8,240
February 24	M. S. Brennan	510	4,300	9.85	16,000
February 25	M. S. Brennan	510	4,740	10.55	18,600
February 27	M. S. Brennan	510	4,130	9.36	15,400
February 27	M. S. Brennan	510	4,180	9.45	16,500
February 28	M. S. Brennan	510	4,000	9.13	14,900
May 3	M. S. Brennan	494	1,430	4.10	4,570

DISCHARGE MEASUREMENTS OF ROCK RIVER BELOW MOUTH OF PECATONICA RIVER—*Concluded*

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet	*Sq. feet*	*Feet*	*Sec.-feet*
1907					
**April 30	A. H. Horton	498	1,520	3.23	5,110
April 30	A. H. Horton	517	1,610	3.33	5,240
1908					
††February 5	G. A. Gray	508	1,100	2.85	2,000
‡‡February 21	G. A. Gray	427	2,940	7.37	8,520
April 3	G. A. Gray	512	2,320	4.90	7,860
April 11	G. A. Gray	500	1,910	4.12	6,430
1909					
February 9	W. M. O'Neill	515	2,615	4.85	8,780

* High wind; velocity doubtful.
† Partly frozen.
‡ Ice 0.59 foot thick.
§ Measurements January 31 to February 28 were slightly affected by ice below the gaging section.
** New gage datum.
†† Ice present; average thickness of ice 0.8 foot.
‡‡ Ice gorge below gage.

DAILY GAGE HEIGHT, IN FEET, OF ROCK RIVER BELOW MOUTH OF PECATONICA RIVER AT ROCKTON, ILLINOIS, FOR 1903-1909

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903												
1							2.50	4.10	4.40	3.70	3.10	2.70
2							2.60		4.30	3.60	3.20	2.80
3							2.90		4.20	3.70	3.20	2.70
4							3.70		4.10	3.50	3.10	2.70
5							3.50		4.00	3.70	3.10	2.80
6							3.40		3.90	3.70	3.00	2.70
7							3.40		3.60	4.70	2.90	2.60
8							3.30		3.60	6.00	2.60	2.60
9							3.00	4.10	4.00	5.40	2.70	2.70
10							3.30	4.00	4.10	5.10	2.60	2.60
11							3.50	3.60	4.30	5.00	2.80	2.70
12							3.90	3.20	4.50	4.70	2.90	2.60
13							4.70	3.20	4.30	4.60	3.20	3.80
14							4.60	3.10	5.00	4.40	3.40	3.30
15							4.10	3.40	5.30	4.40	3.30	3.30
16							3.90	3.70	5.70	4.40	3.30	3.40
17							4.00	4.30	5.90	4.30	3.20	3.20
18							3.80	4.20	6.00	4.30	2.70	3.00
19							5.20	3.80	5.70	4.00	3.00	3.30
20							5.70	3.60	5.30	4.10	2.90	3.30
21							6.20	3.50	5.00	4.00	3.00	3.20
22							6.90	3.40	4.80	4.00	2.90	3.20
23							7.20	3.40	4.60	3.80	2.90	3.20
24							7.00	3.50	4.40	3.80	2.80	3.10
25							6.70	3.40	4.00	3.60	2.80	3.10
26							5.80	3.30	3.90	3.60	2.50	3.20
27							4.60	3.60	3.80	3.50	3.10	3.10
28						2.10	4.60	3.90	4.00	3.40	2.70	3.00
29						2.20	4.10	4.30	3.90	3.30	2.90	3.10
30						2.70	4.20	4.60	3.80	3.30	2.90	3.10
31							4.20	4.40		3.10		3.00
1904												
1	2.90	2.90	3.80	10.65	4.53	3.68	2.20	2.10	2.15	3.50	2.65	2.20
2	2.90	2.90	3.95	9.61	4.50	3.68	2.20	1.90	2.15	3.25	2.60	2.15
3	2.90	3.10	6.09	8.85	4.30	3.51	2.25	1.80	2.20	3.15	2.45	2.20
4	3.00	3.20	6.72	8.37	4.18	3.00	2.20	1.80	2.12	3.00	2.50	2.20
5	2.90	3.00	6.83	8.06	4.05	3.20	2.15	1.80	2.30	2.85	2.45	2.25
6	2.80	2.80	6.60	7.85	4.01	3.10	2.15	1.90	2.60	3.20	2.45	2.20
7	2.90	4.50	7.45	7.60	4.00	3.10	2.30	1.95	2.45	3.25	2.25	2.20
8	2.90	5.50	9.92	7.60	4.18	3.11	2.40	1.90	2.35	3.10	2.45	2.20
9	2.90	5.90	10.80	7.60	4.50	3.00	2.50	1.82	2.30	2.75		2.20
10	3.00	6.10	11.12	7.60	4.85	2.95	2.46	1.90	2.31	3.00	2.45	2.20
11	2.60	6.00	11.10	7.61	4.79	2.95	2.35	1.85	2.30	3.40	2.45	2.20
12	2.90	5.80	10.90	7.41	4.76	2.85	2.35	1.75	2.20	3.81	2.50	2.20
13	2.90	5.50	10.30	7.10	4.81	2.80	2.40	1.80	2.20	4.25	2.40	2.40

DAILY GAGE HEIGHT, IN FEET, OF ROCK RIVER BELOW MOUTH OF PECATONICA RIVER AT ROCKTON ILLINOIS—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1904												
14	3.00	4.70	9.33	6.83	4.81	2.75	2.25	1.70	2.26	4.25	2.20	2.45
15	2.80	4.10	8.85	6.50	4.91	2.70	2.20	1.85	2.20	4.50	2.30	2.70
16	2.90	3.90	8.00	6.40	4.95	2.60	2.13	1.55	2.15	3.80	2.45	2.85
17	3.00	3.80	6.84	6.20	4.99	2.62	2.00	1.75	2.10	3.30	2.45	2.70
18	2.70	3.80	5.50	5.91	4.81	2.55	2.10	1.90	2.20	3.15	2.35	3.00
19	3.00	3.60	4.90	5.79	4.80	2.65	2.10	1.75	2.90	3.50	2.45	2.65
20	3.00	3.60	8.35	5.60	4.68	2.50	2.10	1.90	4.00	2.90	2.40	2.90
21	3.10	3.70	8.95	5.48	4.60	2.50	2.00	1.95	3.80	2.75	2.20	2.80
22	3.10	3.60	12.75	5.35	4.48	2.50	2.00	2.50	3.25	2.70	2.30	2.70
23	3.20	3.50	13.23	5.16	4.32	2.50	2.00	2.80	2.80	2.70	2.30	2.45
24	3.30	3.30	12.05	5.18	4.28	2.45	2.00	3.00	2.55	2.75	2.20	2.50
25	3.20	3.50	12.25	5.53	4.31	2.40	1.75	3.10	2.35	2.70	2.30	2.50
26	3.30	3.50	12.55	5.55	4.18	2.35	2.10	2.70	2.65	2.65	2.40	2.50
27	3.30	3.60	12.40	5.31	4.10	2.15	2.50	2.30	3.35	2.65	2.20	3.00
28	3.10	3.60	12.30	5.04	3.90	2.20	2.10	2.40	4.20	2.70	2.20	4.20
29	3.00	3.80	11.85	4.80	3.85	2.20	2.00	2.10	4.12	2.60	2.20	5.10
30	2.90	.....	11.45	4.68	3.79	2.20	2.00	2.20	3.65	2.55	2.30	5.15
31	2.90	.....	11.16	.....	3.80	.....	2.00	2.30	.....	2.75	.....	4.60
1905												
1	4.0	.....	4.0	10.1	4.2	4.3	4.3	2.8	2.8	2.3	2.6	3.5
2	3.8	3.2	5.0	9.4	4.1	4.25	4.3	2.75	2.95	2.05	2.6	3.5
3	4.55	.....	5.4	8.9	3.8	4.2	4.3	2.7	3.85	2.2	2.7	3.0
4	3.9	3.15	6.2	8.7	3.8	4.2	4.1	2.65	3.4	2.2	2.6	3.2
5	3.65	3.15	6.1	8.4	3.6	4.3	4.0	3.15	3.5	2.15	2.65	3.1
6	3.45	3.1	5.8	8.3	3.65	5.0	3.9	3.1	3.45	2.2	3.0	3.15
7	3.3	3.25	5.7	8.1	3.6	4.85	4.0	3.0	3.4	2.15	2.9	3.05
8	3.5	3.25	5.5	7.8	3.55	4.9	4.05	3.0	3.4	2.1	3.1	3.05
9	3.5	3.25	5.5	7.6	3.4	5.1	3.95	2.75	3.3	1.9	3.1	3.0
10	4.2	3.25	6.4	7.4	3.55	5.3	3.95	2.7	3.3	2.0	3.15	3.0
11	4.0	3.3	6.2	7.2	3.95	5.2	4.0	2.65	3.4	2.0	3.0	3.1
12	4.1	3.3	5.6	6.8	5.8	5.4	4.05	2.6	3.15	2.1	2.8	2.95
13	3.75	3.4	5.6	6.5	6.0	5.4	4.2	2.5	3.05	2.05	2.8	2.85
14	3.85	3.15	5.5	6.3	6.4	5.4	4.2	2.8	2.9	2.1	3.0	2.95
15	4.0	3.2	5.3	6.0	7.0	5.3	4.1	2.65	2.9	2.05	2.75	2.75
16	3.7	3.2	5.2	5.8	7.3	5.3	4.0	2.6	2.8	2.05	2.7	2.7
17	3.8	3.25	5.0	5.6	6.9	5.3	3.7	2.7	2.75	2.2	2.7	2.75
18	3.5	3.35	7.1	5.3	6.5	5.4	3.55	2.45	2.9	2.5	2.7	2.5
19	3.35	3.35	8.2	5.2	6.3	5.3	3.35	2.61	2.7	4.1	2.7	2.65
20	3.3	3.15	8.0	4.9	6.4	5.1	3.4	3.3	2.55	4.3	2.75	2.6
21	3.15	3.3	8.6	5.2	5.9	5.2	3.3	3.1	2.5	4.0	2.65	2.6
22	3.2	3.35	9.2	5.3	5.6	5.2	3.2	2.75	2.5	3.85	2.7	2.6
23	3.05	3.5	10.2	5.1	5.3	5.3	3.1	2.7	2.5	3.6	2.75	2.6
24	3.1	3.35	10.8	4.9	5.1	5.2	3.1	2.7	2.5	3.45	2.7	2.65
25	3.15	3.3	11.1	4.7	4.7	5.0	3.1	2.65	2.8	3.4	2.7	2.3
26	3.25	3.5	11.4	4.5	4.75	4.7	2.8	3.1	2.5	3.35	2.5	2.65
27	3.2	3.4	11.4	4.5	4.7	4.6	2.8	3.1	2.45	3.2	2.5	2.8
28	3.1	3.65	11.0	4.45	4.6	4.55	2.85	3.3	2.4	3.2	2.75	2.6
29	3.2	.....	11.0	4.35	4.6	4.4	3.1	3.3	2.3	3.05	3.15	3.05
30	3.0	.....	10.9	4.1	4.5	4.2	3.1	3.0	2.35	3.05	3.1	4.6
31	3.0	.....	10.7	.....	4.5	.....	2.95	2.85	.....	2.95	.....	3.5
1906												
1	3.3	5.45	8.8	8.7	4.15	3.15	3.3	.....	.....	1.1	1.5	3.25
2	2.95	5.0	8.8	8.45	4.15	3.0	3.2	.....	.....	1.4	1.6	3.0
3	2.85	5.72	11.15	7.95	4.1	2.8	3.15	.....	.....	1.3	1.4	2.85
4	3.9	5.45	10.8	7.0	4.1	2.45	3.05	.....	.....	1.2	1.5	2.7
5	4.57	6.75	10.0	6.25	4.0	2.8	3.0	.....	.....	1.1	1.45	2.6
6	4.9	6.9	10.25	6.15	3.9	2.8	2.9	.....	.....	1.05	1.55	2.9
7	4.9	5.75	9.85	6.1	3.95	2.8	2.85	.....	.....	1.4	1.55	2.65
8	5.6	7.15	9.45	6.15	3.85	2.8	2.7	.....	.....	1.15	1.5	2.25
9	6.25	6.5	9.25	6.65	3.8	2.6	2.7	.....	.....	1.1	1.4	2.4
10	6.0	5.45	8.75	7.0	3.7	2.6	2.6	.....	.....	1.0	1.4	2.4
11	4.85	5.75	8.4	7.0	3.6	2.55	2.6	.....	.....	1.1	1.4	2.35
12	4.0	5.7	6.8	6.45	3.6	2.7	2.5	.....	.....	1.1	1.35	2.35
13	3.5	4.7	6.05	6.8	3.4	2.6	2.4	.....	.....	1.1	1.45	2.3
14	3.1	4.7	6.2	6.4	3.5	2.5	2.45	.....	.....	1.1	1.4	2.3
15	3.4	5.88	6.2	6.15	3.5	2.5	2.5	.....	.....	1.0	1.4	2.3
16	8.4	5.7	6.0	6.25	3.45	2.5	2.45	.....	.....	.95	1.3	2.0
17	7.25	5.45	6.25	6.05	3.2	2.3	2.5	.....	.....	1.0	1.15	2.0
18	7.1	5.1	5.61	5.9	3.15	2.3	2.4	.....	.....	1.0	1.3	2.0
19	7.3	4.3	5.31	5.75	3.0	2.45	2.3	.....	.....	.95	1.1	2.15
20	7.3	5.0	5.0	5.6	2.95	2.35	2.4	.....	.....	1.0	1.3	2.2
21	9.62	9.4	4.75	5.4	3.05	2.7	.....	.....	.....	1.25	1.3	2.0
22	9.5	9.1	4.3	5.35	2.9	2.6	.....	.....	.....	1.25	1.75	2.0
23	7.85	8.83	4.5	5.25	2.9	2.7	.....	.....	.....	1.3	1.95	2.0
24	8.7	9.25	4.4	5.0	2.9	2.65	.....	.....	.....	1.25	1.75	2.0
25	9.3	10.7	4.4	4.8	2.85	2.6	.....	.....	.....	1.3	1.8	1.5
26	9.5	9.85	4.65	4.7	2.9	2.75	.....	.....	.....	1.35	2.4	2.5
27	9.15	9.4	8.21	4.55	3.1	2.6	.....	.....	.....	1.4	3.4	1.5

DAILY GAGE HEIGHT, IN FEET, OF ROCK RIVER BELOW MOUTH OF PECATONICA RIVER AT ROCKTON, ILLINOIS—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1906												
28	8.3	9.25	8.3	4.53	3.4	2.5	.....	.....	.....	1.5	3.9	1.5
29	7.8	.....	8.7	4.5	3.2	3.1	.....	.....	.....	1.6	3.85	1.65
30	7.1	.....	8.8	4.21	3.6	3.3	.....	.....	.....	1.6	3.65	1.45
31	6.05	.....	8.75	.....	3.5	.....	.....	.....	.....	1.7	.....	3.01
1907												
1	4.2	.....	2.7	6.3	3.5	3.0	2.2	3.2	2.1	5.1	1.95	2.0
2	3.7	.....	2.6	6.0	3.5	2.9	2.15	3.0	2.05	5.15	1.85	1.9
3	3.6	.....	2.5	5.1	3.25	2.7	2.1	2.85	2.1	4.65	1.75	1.75
4	4.4	.....	2.5	4.8	3.35	2.55	2.0	2.8	2.0	4.2	1.85	1.8
5	4.25	.....	2.5	4.75	3.0	3.1	3.6	2.8	1.9	4.05	2.0	1.85
6	4.05	.....	2.65	4.65	2.9	3.15	3.4	2.6	1.8	3.85	1.85	1.95
7	4.05	.....	2.5	4.6	2.8	3.7	3.2	2.5	1.75	3.5	1.75	1.7
8	4.9	.....	2.4	4.9	2.8	4.1	3.0	2.4	1.7	3.4	1.8	1.75
9	4.3	.....	2.3	5.25	2.8	4.7	3.15	2.55	1.65	3.2	1.75	1.85
10	4.15	.....	2.3	5.3	2.4	4.5	3.1	2.5	1.8	3.0	1.65	1.9
11	3.9	.....	2.3	5.2	2.5	4.2	2.65	2.35	1.7	2.85	1.6	2.0
12	3.5	.....	2.3	4.95	2.3	4.0	4.3	2.2	1.8	2.85	1.7	2.0
13	3.4	.....	2.6	4.7	2.1	4.1	4.2	2.15	1.75	2.8	1.7	1.9
14	2.95	.....	2.5	4.6	1.8	4.0	4.15	2.1	1.65	2.6	1.45	1.7
15	2.95	.....	3.5	4.45	2.1	3.9	3.7	2.0	1.55	2.55	1.7	1.75
16	2.3	.....	3.3	4.3	2.0	3.65	3.25	2.0	1.25	2.6	1.6	1.8
17	2.3	.....	3.2	4.1	2.1	3.15	3.2	2.5	1.45	2.5	1.55	1.75
18	2.3	3.7	3.2	4.1	2.15	3.2	3.0	3.5	2.55	2.15	1.6	1.8
19	7.1	4.0	3.15	4.1	2.0	3.5	2.95	3.2	3.6	2.45	1.55	1.8
20	8.0	4.1	3.15	3.85	1.9	3.2	2.75	3.15	4.55	2.5	1.6	1.7
21	4.7	4.3	3.1	3.8	1.9	3.1	2.6	3.2	5.25	2.3	1.7	1.6
22	5.7	4.4	3.1	3.5	1.9	2.85	3.3	3.2	5.35	2.2	2.0	1.4
23	6.8	5.0	3.15	3.35	2.2	2.85	4.5	3.25	5.35	2.1	2.0	1.65
24	7.5	4.35	3.35	3.4	2.6	2.8	4.8	3.15	4.8	2.0	2.3	1.7
25	7.0	3.9	3.4	3.4	2.8	2.9	5.5	2.8	3.7	2.0	2.3	1.7
26	6.3	3.5	3.35	3.25	3.3	2.95	5.85	2.5	3.15	2.0	2.1	1.75
27	6.45	3.0	3.5	3.0	3.45	2.75	5.8	2.5	2.9	1.9	2.0	1.7
28	6.1	2.9	3.5	3.0	3.6	2.4	5.3	2.45	3.3	2.0	2.0	1.8
29	.....	.....	3.9	3.05	3.3	2.5	5.0	2.25	4.5	1.9	2.1	1.85
30	.....	.....	5.2	3.28	3.2	2.3	3.65	2.25	4.8	1.9	2.1	1.9
31	.....	.....	5.65	.....	3.0	.....	3.4	2.2	.....	1.9	.....	2.0
1908												
1	1.60	3.60	6.05	5.55	4.80	4.70	2.15	1.48	1.05	1.08	1.20	1.70
2	1.95	4.00	6.00	5.20	4.78	4.48	2.18	1.45	1.15	1.00	1.10	1.35
3	1.80	2.50	5.82	4.90	4.55	4.25	2.30	1.40	1.08	1.00	1.10	1.20
4	1.85	2.95	5.92	4.65	4.55	4.05	2.82	1.38	1.10	.95	1.15	1.40
5	2.10	2.90	5.75	4.40	4.58	3.95	3.35	1.22	1.08	.98	1.12	1.35
6	2.00	.....	7.33	4.48	4.70	3.82	3.18	1.32	1.15	.95	1.12	1.15
7	1.90	2.80	7.50	4.42	4.82	4.05	2.88	1.30	.98	1.00	1.18	1.40
8	1.90	.....	7.60	4.52	5.00	4.92	2.85	1.25	1.10	.98	.95	1.50
9	2.10	.....	7.55	4.45	5.05	4.43	2.42	1.15	1.10	.98	1.05	1.50
10	2.00	.....	7.72	4.32	4.85	4.02	2.30	1.10	1.00	1.12	1.10	1.55
11	1.70	2.40	7.60	4.10	4.75	3.72	2.02	1.12	1.00	1.05	1.08	1.45
12	1.70	.....	7.32	4.50	4.60	3.42	1.90	1.18	1.05	1.05	1.10	1.50
13	2.00	7.20	7.05	3.70	4.85	3.35	2.12	1.22	.95	.95	1.10	1.40
14	1.70	5.51	6.50	3.82	5.02	4.30	2.05	1.32	1.15	1.08	1.02	1.25
15	1.85	5.54	5.65	3.60	5.75	4.15	2.00	1.42	1.00	1.02	1.05	1.35
16	1.80	5.71	5.50	3.65	5.45	3.60	2.05	1.75	1.00	.95	1.05	1.35
17	2.00	6.51	5.35	3.42	5.30	3.30	2.18	1.62	1.12	.95	.90	1.40
18	1.75	6.56	5.30	3.35	5.45	3.10	3.30	1.48	1.05	.93	1.08	1.52
19	1.90	6.91	5.18	3.25	5.95	2.85	3.75	1.40	.98	1.00	1.10	1.75
20	1.65	7.51	4.90	3.28	6.15	2.75	3.90	1.42	.95	1.05	1.08	1.95
21	1.40	7.40	4.65	3.18	5.95	3.00	3.38	1.28	.95	1.12	1.12	1.85
22	1.60	7.00	4.50	3.03	5.80	4.40	2.65	1.18	.95	1.08	1.15	1.75
23	1.50	6.01	4.35	3.00	5.60	4.70	2.18	1.35	.95	1.10	1.28	1.75
24	1.80	4.40	4.20	3.18	5.40	4.78	2.00	1.19	1.00	1.18	1.48	1.65
25	1.85	3.63	4.15	3.00	4.90	4.95	1.88	1.18	.95	1.15	1.68	1.65
26	1.60	5.38	3.92	3.00	4.70	4.65	1.85	1.08	1.00	1.12	1.58	1.85
27	2.00	5.30	4.00	4.08	4.45	3.78	1.80	1.05	.95	1.18	1.68	1.25
28	1.80	5.50	4.70	4.50	4.20	3.00	1.70	1.28	1.02	1.18	1.68	1.35
29	2.55	6.35	5.35	4.32	4.55	2.60	1.50	1.08	1.00	1.22	1.50	1.45
30	2.95	.....	5.55	4.80	4.68	2.25	1.48	1.20	1.00	1.18	1.70	1.45
31	2.40	.....	5.47	.....	4.75	.....	1.52	1.05	.....	1.20	.....	1.55
1909												
1	1.75	.....	6.05	.....	.....	.....	.....	.....	.....	.....	.....	.....
2	1.78	3.8	5.8	.....	.....	.....	.....	.....	.....	.....	.....	.....
3	1.35	3.15	5.4	.....	.....	.....	.....	.....	.....	.....	.....	.....
4	1.2	3.2	4.88	.....	.....	.....	.....	.....	.....	.....	.....	.....
5	1.35	4.05	4.82	.....	.....	.....	.....	.....	.....	.....	.....	.....
6	2.35	5.35	4.92	.....	.....	.....	.....	.....	.....	.....	.....	.....
7	2.88	4.9	5.0	.....	.....	.....	.....	.....	.....	.....	.....	.....
8	2.85	5.05	5.15	.....	.....	.....	.....	.....	.....	.....	.....	.....
9	2.52	4.85	5.45	.....	.....	.....	.....	.....	.....	.....	.....	.....

DAILY GAGE HEIGHT, IN FEET, OF ROCK RIVER BELOW MOUTH OF PECATONICA RIVER AT ROCKTON, ILLINOIS—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
10	2.45	3.78	6.18									
11	2.52	3.72	6.28									
12	2.48	4.1	6.28									
13	2.55	3.85	5.98									
14	2.45	3.4	5.2									
15	2.22	4.05	4.15									
16	2.38	6.2	3.82									
17	2.1	5.42	3.45									
18	2.25	4.7	3.48									
19	2.32	3.88	3.5									
20	2.15	3.15	3.55									
21	2.1	2.7	3.8									
22	2.1	4.68	4.4									
23	6.12	5.75	4.7									
24	5.55	6.88	4.9									
25	5.55	6.1	5.1									
26	5.15	6.45	4.9									
27	5.55	6.6	4.8									
28	5.85	6.15	4.55									
29	5.95		4.3									
30	4.25		4.12									
31			4.05									

NOTE—River partially frozen January 1, to March 27, 1904 and December 13–31, 1904. Ice conditions uncertain during January and February, 1905. Partial ice conditions during December, 1905. Ice conditions January 5–10, February 8–20 and December, 1906.

Station was temporarily discontinued July 5–September 30, 1906. Datum was raised one foot October 1, 1906, and one foot should be subtracted from all gage heights previous to that date before applying rating table.

Stream frozen about January 29–February 17, 1907. Ice conditions probably prevailed from the last of January to the middle of February 1908, and January 1–March 1, 1909. Stream frozen across February 17, 1909.

RATING TABLE FOR ROCK RIVER BELOW MOUTH OF PECATONICA RIVER, AT ROCKTON, ILLINOIS, FROM JANUARY 1, 1904–MARCH 31, 1909

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
0.50	900	3.40	5,350	6.30	12,270	9.20	19,520
0.60	1,000	3.50	5,550	6.40	12,520	9.30	19,770
0.70	1,100	3.60	5,760	6.50	12,770	9.40	20,020
0.80	1,210	3.70	5,970	6.60	13,020	9.50	20,270
0.90	1,320	3.80	6,180	6.70	13,270	9.60	20,520
1.00	1,440	3.90	6,400	6.80	13,520	9.70	20,770
1.10	1,560	4.00	6,620	6.90	13,770	9.80	21,020
1.20	1,690	4.10	6,840	7.00	14,020	9.90	21,270
1.30	1,820	4.20	7,070	7.10	14,270	10.00	21,520
1.40	1,960	4.30	7,300	7.20	14,520	10.10	21,770
1.50	2,100	4.40	7,540	7.30	14,770	10.20	22,020
1.60	2,250	4.50	7,780	7.40	15,020	10.30	22,270
1.70	2,400	4.60	8,020	7.50	15,270	10.40	22,520
1.80	2,550	4.70	8,270	7.60	15,520	10.50	22,770
1.90	2,710	4.80	8,520	7.70	15,770	10.60	23,020
2.00	2,870	4.90	8,770	7.80	16,020	10.70	23,270
2.10	3,030	5.00	9,020	7.90	16,270	10.80	23,520
2.20	3,190	5.10	9,270	8.00	16,520	10.90	23,770
2.30	3,360	5.20	9,520	8.10	16,770	11.00	24,020
2.40	3,530	5.30	9,770	8.20	17,020	11.10	24,270
2.50	3,700	5.40	10,020	8.30	17,270	11.20	24,520
2.60	3,870	5.50	10,270	8.40	17,520	11.30	24,770
2.70	4,040	5.60	10,520	8.50	17,770	11.40	25,020
2.80	4,220	5.70	10,770	8.60	18,020	11.50	25,270
2.90	4,400	5.80	11,020	8.70	18,270	11.60	25,520
3.00	4,580	5.90	11,270	8.80	18,520	11.70	25,770
3.10	4,770	6.00	11,520	8.90	18,770	11.80	26,020
3.20	4,960	6.10	11,770	9.00	19,020	10.90	26,270
3.30	5,150	6.20	12,020	9.10	19,270	12.00	26,520

RATING TABLE FOR ROCK RIVER BELOW MOUTH OF PECATONICA RIVER AT ROCKTON, ILLINOIS—*Concluded*

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
12.10	26,770	12.40	27,520	12.70	28,270	13.00	29,020
12.20	27,020	12.50	27,770	12.80	28,520		
12.30	27,270	12.60	28,020	12.90	28,770		

NOTE—The above table is not applicable for ice or obstructed channel conditions. It is based on discharge measurements made during 1904–1909 and is well defined between gage heights 3.3 feet and 7.0 feet. Above gage height 7.0 feet the rating curve is fairly well defined. The gage datum was raised 1.0 foot October 1, 1906, and the gage heights of all measurements previous to that date were corrected by (—)1.0 foot before plotting. One foot should be subtracted from gage heights previous to October 1, 1906, before entering this table.

DAILY DISCHARGE, IN SECOND-FEET, ROCK RIVER BELOW MOUTH OF PECATONICA RIVER AT ROCKTON, ILLINOIS, FOR 1903–09

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903												
1							2,100	4,770	5,350	4,040	3,030	2,400
2							2,250	4,770	5,150	3,870	3,190	2,550
3							2,710	4,770	4,960	4,040	3,190	2,400
4							4,040	4,770	4,770	3,700	3,030	2,400
5							3,700	4,770	4,580	4,040	3,030	2,550
6							3,530	4,770	4,400	4,040	2,870	2,400
7							3,530	4,770	3,870	5,970	2,710	2,250
8							3,300	4,770	3,870	9,020	2,250	2,250
9							2,870	4,770	4,580	7,540	2,400	2,400
10							3,360	4,580	4,770	6,840	2,250	2,250
11							3,700	3,870	5,150	6,620	2,550	2,400
12							4,400	3,190	5,550	5,970	2,710	2,250
13							5,970	3,190	5,150	5,760	3,190	.....
14							5,760	3,030	6,620	5,350	3,530	.....
15							4,770	3,530	7,300	5,350	3,360	.....
16							4,400	4,040	8,270	5,350	3,360	.....
17							4,580	5,150	8,770	5,150	3,190	.....
18							4,220	4,960	9,020	5,150	2,400	.....
19							7,070	4,220	8,270	4,580	2,870	.....
20							8,270	3,870	7,300	4,770	2,710	.....
21							9,520	3,700	6,620	4,580	2,870	.....
22							11,300	3,530	6,180	4,580	2,710	.....
23							12,000	3,530	5,760	4,220	2,710	.....
24							11,500	3,700	5,350	4,220	2,550	.....
25							10,800	3,530	4,580	3,870	2,550	.....
26							8,520	3,360	4,400	3,870	2,100	.....
27							5,760	3,870	4,220	3,700	3,030	.....
28						1,960	5,760	4,400	4,580	3,530	2,400	.....
29						1,690	4,770	5,150	4,400	3,360	2,710	.....
30						2,400	4,960	5,760	4,220	3,360	2,710	.....
31							4,960	5,350	.....	3,030	.....	.....
1904												
1				20,600	5,610	4,010	1,690	1,560	1,620	3,700	2,320	1,690
2				18,000	5,550	4,010	1,690	1,320	1,620	3,280	2,250	1,620
3				16,100	5,150	3,720	1,760	1,210	1,690	3,110	2,030	1,690
4				14,900	4,920	2,870	1,690	1,210	1,590	2,870	2,100	1,690
5				14,200	4,680	3,190	1,620	1,210	1,820	2,630	2,030	1,760
6				13,600	4,600	3,030	1,620	1,320	2,250	3,190	2,030	1,690
7				13,000	4,580	3,030	1,820	1,380	2,030	3,280	1,760	1,690
8				13,000	4,940	3,050	1,960	1,320	1,890	3,030	2,030	1,690
9				13,000	5,550	2,870	2,100	1,230	1,820	2,480	2,020	1,690
10				13,000	6,290	2,790	2,040	1,320	1,830	2,870	2,030	1,690
11				13,000	6,160	2,790	1,890	1,260	1,820	3,530	2,030	1,690
12				12,600	6,100	2,630	1,890	1,160	1,690	4,240	2,100	1,690
13				11,800	6,200	2,550	1,960	1,210	1,690	5,060	1,960	.....
14				11,100	6,200	2,480	1,760	1,100	1,770	5,060	1,690	.....
15				10,300	6,420	2,400	1,690	1,260	1,690	5,550	1,820	.....
16				10,000	6,510	2,250	1,690	950	1,620	4,220	2,030	.....
17				9,520	6,600	2,280	1,440	1,160	1,560	3,360	2,030	.....
18				8,800	6,200	2,180	1,560	1,320	1,690	3,110	1,890	.....
19				8,500	6,180	2,320	1,560	1,160	2,710	3,700	2,030	.....
20			14,900	8,020	5,930	2,100	1,560	1,320	4,580	2,710	1,960	.....
21			14,900	7,730	5,760	2,100	1,440	1,380	4,220	2,480	1,690	.....

DAILY DISCHARGE, IN SECOND-FEET, ROCK RIVER BELOW MOUTH OF PECATONICA RIVER AT ROCKTON, ILLINOIS—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1904												
22	.....	.....	25,900	7,420	5,510	2,100	1,440	2,100	3,280	2,400	1,820	1,900
23	.....	.....	27,100	6,980	5,190	2,100	1,440	2,550	2,550	2,400	1,820	2,000
24	.....	.....	24,100	7,020	5,110	2,030	1,440	2,870	1,180	2,480	1,690	2,100
25	.....	.....	24,600	7,850	5,170	1,960	1,160	3,030	1,890	2,400	1,820	2,200
26	.....	.....	25,400	7,900	4,920	1,890	1,560	2,400	2,320	2,320	1,960	2,300
27	.....	.....	25,000	7,320	4,770	1,620	2,100	1,820	3,440	2,320	1,690	2,400
28	.....	.....	24,800	6,710	4,400	1,690	1,560	1,960	4,960	2,100	1,690	2,500
29	.....	.....	23,600	6,180	4,310	1,690	1,440	1,560	4,810	2,250	1,690	2,600
30	.....	.....	22,600	5,820	4,200	1,690	1,440	1,690	3,960	2,180	1,820	2,700
31	.....	.....	21,900	.....	4,220	.....	1,440	1,820	.....	2,480	.....	2,800
1905												
1	.....	.....	.....	19,300	4,960	5,150	5,150	2,550	2,550	1,820	2,250	3,700
2	.....	.....	.....	17,500	4,770	5,060	5,150	2,480	2,790	1,500	2,250	3,700
3	.....	.....	.....	16,300	4,220	4,960	5,150	2,400	4,310	1,690	2,400	2,870
4	.....	.....	.....	15,800	4,220	4,960	4,770	2,320	3,530	1,690	2,250	3,190
5	.....	.....	.....	15,000	3,870	5,150	4,580	3,110	3,700	1,620	2,320	3,030
6	.....	.....	.....	14,800	3,960	6,620	4,400	3,030	3,620	1,690	2,870	3,110
7	.....	.....	.....	14,300	3,870	6,290	4,580	2,870	3,530	1,620	2,710	2,950
8	.....	.....	.....	13,500	3,780	6,400	4,680	2,870	3,530	1,560	3,030	2,950
9	.....	.....	.....	13,000	3,530	6,840	4,490	2,480	3,360	1,320	3,030	2,870
10	.....	.....	.....	12,500	3,780	7,300	4,490	2,400	2,360	1,440	3,110	2,870
11	.....	.....	.....	12,000	4,490	7,070	4,580	2,320	3,530	1,440	2,870	3,030
12	.....	.....	.....	11,000	8,520	7,540	4,680	2,250	3,110	1,560	2,550	2,790
13	.....	.....	.....	10,300	9,320	7,540	4,960	2,100	1,950	1,500	2,550	2,630
14	.....	.....	.....	9,770	10,000	7,540	4,960	2,550	2,710	1,560	2,870	2,790
15	.....	.....	.....	9,020	11,500	7,300	4,770	2,320	2,710	1,500	2,480	2,480
16	.....	.....	.....	8,520	12,300	7,300	4,550	2,250	2,550	1,500	2,400	2,400
17	.....	.....	.....	8,020	11,300	7,300	4,040	2,400	2,480	1,690	2,400	2,480
18	.....	.....	.....	7,300	10,300	7,540	3,780	2,030	2,710	2,100	2,400	2,100
19	.....	.....	.....	7,070	9,770	7,300	3,440	2,260	2,400	4,770	2,400	2,320
20	.....	.....	.....	6,400	10,000	6,840	3,530	3,360	2,180	5,150	2,480	2,250
21	.....	.....	.....	7,070	8,770	7,070	3,360	3,030	2,100	4,580	2,320	2,250
22	.....	.....	.....	7,300	8,020	7,070	3,190	2,480	2,100	4,310	2,400	2,250
23	.....	.....	.....	6,840	7,300	7,300	3,030	2,400	2,100	3,870	2,480	2,250
24	.....	.....	.....	6,400	6,840	7,070	2,030	2,400	2,100	3,620	2,400	2,320
25	.....	.....	21,800	5,970	5,970	6,620	3,030	2,320	1,820	3,530	2,400	1,820
26	.....	.....	22,500	5,550	6,080	5,970	2,550	3,030	2,100	3,440	2,100	2,320
27	.....	.....	22,500	5,550	5,970	5,760	2,550	3,030	2,030	3,190	2,100	2,550
28	.....	.....	21,500	5,450	5,760	5,660	2,630	3,360	1,960	3,190	2,480	2,250
29	.....	.....	21,500	5,250	5,760	5,350	3,030	3,360	1,820	2,950	3,110	2,950
30	.....	.....	21,300	4,770	5,550	4,960	3,030	3,870	1,890	2,950	3,030	5,760
31	.....	.....	20,800	.....	5,550	.....	2,790	2,630	.....	2,790	.....	3,700
1906												
1	3,360	7,660	14,000	15,800	4,860	3,110	3,360	.....	.....	1,560	2,100	5,060
2	2,790	6,620	16,000	15,100	4,860	2,870	3,190	.....	.....	1,960	2,250	4,580
3	2,630	8,320	21,900	13,900	4,770	2,550	3,110	.....	.....	1,820	1,960	4,310
4	4,400	7,660	21,000	11,500	4,770	2,030	2,950	.....	.....	1,690	2,100	4,040
5	4,600	10,900	19,000	9,650	4,580	2,550	2,870	.....	.....	1,560	2,030	3,870
6	5,000	11,300	19,600	9,400	4,400	2,550	2,710	.....	.....	1,500	2,180	4,400
7	5,400	8,400	18,600	9,270	4,490	2,550	2,630	.....	.....	1,960	2,180	3,960
8	5,800	.....	17,600	9,400	4,310	2,550	2,400	.....	.....	1,620	2,100	3,280
9	6,200	.....	17,100	1,0600	4,220	2,250	2,400	.....	.....	1,560	1,960	3,530
10	6,600	.....	15,900	11,500	4,040	2,250	2,250	.....	.....	1,440	1,960	3,530
11	6,290	.....	15,000	11,500	3,870	2,180	2,250	.....	.....	1,560	1,960	3,440
12	4,580	.....	11,000	10,100	3,870	2,400	2,100	.....	.....	1,560	1,890	3,440
13	3,700	.....	9,140	11,000	3,530	2,250	1,960	.....	.....	1,560	2,030	3,360
14	3,030	.....	9,520	10,000	3,700	2,100	1,030	.....	.....	1,560	1,960	3,360
15	3,530	.....	9,520	9,400	3,700	2,100	2,100	.....	.....	1,440	1,960	3,360
16	15,000	.....	9,020	9,640	3,620	2,100	2,030	.....	.....	1,380	1,820	2,870
17	12,100	.....	9,640	9,140	3,190	1,820	2,100	.....	.....	1,440	1,630	2,870
18	11,800	.....	8,070	8,770	3,110	1,820	1,960	.....	.....	1,440	1,820	2,870
19	12,300	.....	7,320	8,400	2,870	2,030	1,820	.....	.....	1,380	1,560	3,110
20	12,300	.....	6,620	8,020	2,790	1,890	1,960	.....	.....	1,440	1,820	3,190
21	18,100	.....	6,080	7,540	2,950	2,400	.....	.....	.....	1,760	1,820	2,870
22	17,800	.....	5,150	7,420	2,710	2,250	.....	.....	.....	1,760	2,480	2,870
23	13,600	.....	5,550	7,180	2,710	2,400	.....	.....	.....	1,820	2,790	2,870
24	15,800	.....	5,250	6,620	2,710	2,320	.....	.....	.....	1,760	2,480	2,870
25	17,300	.....	5,350	6,180	2,630	2,250	.....	.....	.....	1,820	2,550	2,100
26	17,800	.....	5,860	5,970	2,710	2,480	.....	.....	.....	1,890	3,530	3,700
27	16,900	.....	14,600	5,660	3,020	2,250	.....	.....	.....	1,960	5,350	3,100
38	14,800	.....	14,800	5,610	3,530	2,100	.....	.....	.....	2,100	6,400	2,100
29	13,500	.....	15,800	5,550	3,190	3,030	.....	.....	.....	2,250	6,200	2,320
30	11,800	.....	16,000	4,980	3,870	3,360	.....	.....	.....	2,250	5,860	2,030
31	9,140	.....	15,900	.....	3,700	.....	.....	.....	.....	2,400	.....	4,600
1907												
1	7,070	.....	4,040	12,300	5,550	4,580	3,190	4,960	3,030	9,270	2,790	.....
2	5,970	.....	3,870	11,500	5,550	4,400	3,110	4,580	2,950	9,400	2,630	.....
3	5,760	.....	3,700	9,270	5,040	4,040	3,030	4,310	3,030	8,140	2,480	.....
4	7,540	.....	3,700	8,520	5,270	3,780	2,870	4,220	2,870	7,070	2,630	.....

DAILY DISCHARGE, IN SECOND-FEET, ROCK RIVER BELOW MOUTH OF PECATONICA RIVER AT ROCKTON, ILLINOIS—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1907												
5	7,180	.....	3,700	8,400	4,580	4,770	5,760	4,220	2,710	6,730	2,870	.....
6	6,730	.....	3,960	8,140	4,400	4,860	5,350	3,870	2,550	6,290	2,630	.....
7	6,730	.....	3,700	8,020	4,220	5,970	4,960	3,700	2,484	3,550	2,480	.....
8	8,770	.....	3,530	8,770	4,220	6,840	4,580	3,530	2,400	5,350	2,550	.....
9	7,300	.....	3,360	9,640	4,220	8,270	4,860	3,780	2,320	4,960	2,480	.....
10	6,960	.....	3,360	9,770	2,530	7,780	4,770	3,700	2,550	4,580	2,320	.....
11	6,400	.....	3,360	9,520	3,700	7,070	3,960	3,440	2,400	4,310	2,250	.....
12	5,550	.....	3,360	8,900	3,360	6,620	7,300	3,190	2,550	4,310	2,400	.....
13	5,350	.....	3,870	8,270	3,030	6,840	7,070	3,110	2,480	4,220	2,400	.....
14	4,490	.....	3,700	8,020	2,550	6,620	6,960	3,030	2,320	3,870	2,030	.....
15	4,490	.....	5,550	7,660	3,030	6,400	5,970	2,870	2,180	3,780	2,400	.....
16	3,360	.....	5,150	7,300	2,870	5,860	5,060	2,870	1,760	3,870	2,250	.....
17	3,360	.....	4,960	6,840	3,030	5,450	4,960	3,700	2,030	3,700	2,180	.....
18	3,360	5,970	4,960	6,840	3,110	4,960	4,580	5,550	3,780	3,620	2,250	.....
19	14,300	6,620	4,860	6,840	2,870	5,550	4,490	4,960	5,760	3,620	2,180	.....
20	16,500	6,840	4,860	6,290	2,710	4,960	4,130	4,860	7,900	3,700	2,250	.....
21	8,270	7,300	4,770	6,180	2,710	4,770	3,870	4,960	9,640	3,360	2,400	.....
22	.....	7,540	4,770	5,550	2,710	4,310	5,150	4,960	9,990	3,190	2,870	.....
23	.....	9,020	4,860	5,250	3,190	4,310	7,780	5,060	9,900	3,030	2,870	.....
24	.....	7,420	5,250	5,350	3,870	4,220	8,520	4,860	8,520	2,870	3,360	.....
25	.....	6,400	5,350	5,350	4,220	4,400	10,300	4,220	5,970	2,870	3,360	.....
26	.....	5,550	5,250	5,060	5,150	4,490	11,100	3,700	4,840	2,870	3,030	.....
27	.....	4,580	5,550	4,580	5,450	4,130	11,000	3,700	4,400	2,710	2,870	.....
28	.....	4,400	5,550	4,580	5,760	3,530	9,770	3,620	5,150	2,870	2,870	.....
29	.....	.....	6,400	4,680	5,150	3,700	9,020	3,280	7,780	2,710	3,030	.....
30	.....	.....	9,520	5,110	4,960	3,360	5,860	3,280	8,520	2,710	3,030	.....
31	.....	.....	10,600	.....	4,580	.....	5,350	3,190	.....	2,710	.....	.....
1908												
1	2,250	.....	11,600	10,400	8,520	8,270	3,110	2,070	1,540	1,540	1,690	2,400
2	2,790	.....	11,500	9,520	8,470	7,730	3,160	2,030	1,620	1,440	1,560	1,890
3	2,550	.....	11,100	8,770	7,900	7,180	3,360	1,960	1,540	1,440	1,560	1,560
4	2,630	.....	11,300	8,140	7,900	6,730	4,260	1,930	1,560	1,380	1,620	1,960
5	3,030	.....	10,900	7,540	7,970	6,510	5,250	1,720	1,540	1,420	1,590	1,890
6	2,870	.....	14,800	7,730	8,270	6,220	4,920	1,850	1,620	1,380	1,590	1,620
7	2,710	.....	15,300	7,590	8,570	6,730	4,360	1,820	1,420	1,440	1,660	1,960
8	2,710	.....	15,500	7,830	9,020	8,820	3,960	1,760	1,560	1,420	1,380	2,100
9	3,030	.....	15,400	7,660	9,140	7,610	3,560	1,620	1,560	1,420	1,500	2,100
10	2,870	.....	15,800	7,350	8,640	6,660	3,360	1,560	1,440	1,590	1,560	2,180
11	2,400	.....	15,500	6,840	8,400	6,010	2,900	1,590	1,440	1,500	1,540	2,030
12	2,400	8,000	14,800	7,780	8,020	5,390	2,710	1,660	1,500	1,500	1,560	2,100
13	2,870	14,500	14,100	5,970	8,640	6,290	3,060	1,720	1,380	1,380	1,560	1,960
14	2,400	12,700	12,800	6,220	9,070	7,300	2,950	1,850	1,620	1,540	1,460	1,760
15	2,630	10,900	10,600	5,760	10,900	6,960	2,870	1,990	1,440	1,460	1,500	1,890
16	2,550	9,100	10,300	5,860	10,100	5,760	2,850	2,480	1,440	1,380	1,500	1,890
17	2,870	7,300	9,900	5,390	9,770	5,150	3,160	2,280	1,590	1,380	1,320	1,960
18	2,480	7,350	9,770	5,250	10,100	4,770	5,150	2,070	1,500	1,380	1,540	2,130
19	2,710	7,700	9,470	5,060	11,400	4,310	6,080	1,960	1,420	1,440	1,560	2,480
20	2,320	8,720	8,770	5,110	1,900	3,130	6,400	1,990	1,380	1,500	1,540	2,790
21	1,960	8,550	8,140	4,920	11,400	4,580	5,310	1,790	1,380	1,590	1,590	2,630
22	.....	7,980	7,780	4,680	11,000	7,540	3,960	1,660	1,380	1,540	1,620	2,480
23	.....	9,410	7,420	4,580	10,500	8,270	3,160	1,890	1,380	1,560	1,790	2,480
24	.....	7,540	7,070	4,920	10,000	8,470	2,870	1,560	1,440	1,660	1,070	2,320
25	.....	5,820	6,960	4,580	8,770	8,900	2,680	1,660	1,380	1,620	1,370	2,320
26	.....	9,970	6,440	4,580	8,270	8,140	2,730	1,540	1,440	1,590	1,220	2,630
27	.....	9,770	6,620	6,800	7,660	6,140	2,550	1,500	1,380	1,660	2,370	1,760
28	.....	10,300	8,270	7,780	7,070	4,580	2,400	1,790	1,460	1,660	2,370	1,890
29	.....	12,400	9,900	8,570	7,900	2,870	2,100	1,540	1,440	1,720	2,100	2,030
30	.....	.....	10,400	8,520	8,220	3,280	2,070	1,690	1,440	1,660	1,400	2,030
31	.....	.....	10,200	.....	8,400	.....	2,130	1,500	.....	1,690	.....	2,180
1909												
1	2,480	6,520	11,600	.....	.....	.....	.....	.....	.....	.....	.....	.....
2	2,520	6,180	11,000	.....	.....	.....	.....	.....	.....	.....	.....	.....
3	1,890	4,860	10,000	.....	.....	.....	.....	.....	.....	.....	.....	.....
4	1,690	4,960	8,720	.....	.....	.....	.....	.....	.....	.....	.....	.....
5	1,890	6,730	8,570	.....	.....	.....	.....	.....	.....	.....	.....	.....
6	.....	9,900	8,820	.....	.....	.....	.....	.....	.....	.....	.....	.....
7	.....	8,770	9,020	.....	.....	.....	.....	.....	.....	.....	.....	.....
8	.....	9,140	9,400	.....	.....	.....	.....	.....	.....	.....	.....	.....
9	.....	8,640	10,100	.....	.....	.....	.....	.....	.....	.....	.....	.....
10	.....	6,140	12,000	.....	.....	.....	.....	.....	.....	.....	.....	.....
11	.....	6,010	12,200	.....	.....	.....	.....	.....	.....	.....	.....	.....
12	.....	6,840	12,200	.....	.....	.....	.....	.....	.....	.....	.....	.....
13	.....	6,290	11,500	.....	.....	.....	.....	.....	.....	.....	.....	.....
14	.....	5,350	9,520	.....	.....	.....	.....	.....	.....	.....	.....	.....
15	.....	.....	6,960	.....	.....	.....	.....	.....	.....	.....	.....	.....
16	.....	.....	6,220	.....	.....	.....	.....	.....	.....	.....	.....	.....
17	.....	.....	5,450	.....	.....	.....	.....	.....	.....	.....	.....	.....
18	.....	.....	5,150	.....	.....	.....	.....	.....	.....	.....	.....	.....

DAILY DISCHARGE, IN SECOND-FEET, ROCK RIVER BELOW MOUTH OF PECATONIC RIVER AT ROCKTON, ILLINOIS—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
19	.....	.....	5,550	.....	.....	.....	.....	.....	.....	.....	.....	.....
20	.....	.....	5,660	.....	.....	.....	.....	.....	.....	.....	.....	.....
21	.....	4,040	6,180	.....	.....	.....	.....	.....	.....	.....	.....	.....
22	.....	8,220	7,540	.....	.....	.....	.....	.....	.....	.....	.....	.....
23	.....	10,900	8,270	.....	.....	.....	.....	.....	.....	.....	.....	.....
24	.....	13,700	8,770	.....	.....	.....	.....	.....	.....	.....	.....	.....
25	.....	11,800	9,270	.....	.....	.....	.....	.....	.....	.....	.....	.....
26	9,400	12,600	8,770	.....	.....	.....	.....	.....	.....	.....	.....	.....
27	10,400	13,000	8,520	.....	.....	.....	.....	.....	.....	.....	.....	.....
28	11,100	12,600	7,900	.....	.....	.....	.....	.....	.....	.....	.....	.....
29	11,400	.....	7,300	.....	.....	.....	.....	.....	.....	.....	.....	.....
30	7,180	.....	6,890	.....	.....	.....	.....	.....	.....	.....	.....	.....
31	6,850	.....	6,730	.....	.....	.....	.....	.....	.....	.....	.....	.....

NOTE—Discharge estimated from climatological and other data, because of ice, as follows:

1903: December 13–18, mean discharge estimated 1,800 second-feet; December 19–25, mean discharge estimated 2,200 second-feet; December 26–31, mean discharge estimated 2,000 second-feet.

1904: January 1–31, mean discharge estimated 1,560 second-feet, varying from about 1,400 to 2,000 second-feet; February 1–29, mean discharge estimated 1,630 second feet, varying from about 1,400 to 2,000 second-feet; March 1–19, mean discharge estimated about 8,800 second feet, varying from about 1,600 to 15,000 second-feet; December 13–31, mean discharge estimated about 1,950 second-feet, varying from about 1,500–2,800 second-feet.

1905: January 1–31, mean discharge estimated 2,170 second-feet, varying from about 1,800 to 2,800 second-feet; Feb. 1–28, mean discharge estimated 1,780 second-feet, varying from about 1,600–2,500 second-feet; March 1–24, mean discharge estimated about 10,100 second-feet, varying from about 3,000–21,000 second-feet.

1906: January 5–10, and March 1 and 2, as listed; February 3–28, mean discharge estimated about 10,300 second-feet, varying from about 5,200–18,600 second-feet.

1907: January 22–28, mean discharge estimated 7,000 second-feet.

1908: January 22–31, mean discharge estimated about 1,720 second-feet, varying from about 1,500–2,000 second-feet; February 1–11, mean discharge estimated about 2,170 second-feet, varying from about 1,500 to 3,000 second-feet; February 12–23, as listed.

1909: January 6–13, mean discharge estimated 1,400 second-feet; January 14–20, mean discharge estimated 1,900 second-feet; January 21–23, mean discharge estimated 3,030 second-feet; January 23–25 mean discharge estimated 9,000 second-feet; February 15–20 ,mean discharge estimated 4,500 second-feet. discharge estimated 9,000 second-feet; February 15–20 ,mean discharge estimated 4,500 second-feet.

Discharge interpolated August 2–8, 1903, November 9, 1904, January 31 and February 1, 1909. Gage was not read January 29 to March 17, nor during December, 1907.

The daily and monthly discharges as given in this report differ from the data as published in United State Geological Survey Water Supply Papers Nos. 98, 128, 171, 207, 245, and 265, because of revising the rating curve.

MONTHLY DISCHARGE OF ROCK RIVER BELOW MOUTH OF PECATONICA RIVER AT ROCKTON, ILLINOIS FOR 1903–09

[Drainage area, 6,290 square miles]

Month	Discharge in second-feet				Runoff—depth in inches on drainage area
	Maximum	Minimum	Mean	Per square mile	
1903					
July	12,000	2,100	5,630	0.895	1.03
August	5,760	3,030	4,270	0.679	0.78
September	9,020	3,870	5,600	0.890	0.99
October	9,020	3,030	4,830	0.766	0.88
November	3,530	2,100	2,820	0.447	0.50
December	.....	.....	2,150	0.342	0.39
1904					
January	.....	.....	1,560	0.248	0.29
February	.....	.....	1,630	0.259	0.28
March	27,100	.....	14,300	2.27	2.62
April	20,600	5,820	10,800	1.72	1.92
May	6,600	4,200	5,420	0.862	0.99
June	4,010	1,620	2,510	0.399	0.45
July	2,100	1,160	1,650	0.264	0.30
August	3,030	950	1,550	0.246	0.28
September	4,960	1,560	2,420	0.385	0.43
October	5,550	2,180	3,130	0.498	0.57
November	2,320	1,690	1,930	0.307	0.34
December	.....	.....	1,850	0.294	0.34
The year	27,100	.....	4,070	0.646	8.81

MONTHLY DISCHARGE OF ROCK RIVER BELOW MOUTH OF PECATONICA RIVER AT ROCKTON, ILLINOIS
—*Concluded*

Month	Discharge in second-feet				Runoff—depth in inches on drainage area
	Maximum	Minimum	Mean	Per square mile	
1905					
January	.....	.....	2,170	0.345	0.40
February	.....	.....	1,780	0.283	0.30
March	22,500	.....	12,700	2.02	2.33
April	19,300	4,770	10,100	1.61	1.80
May	12,300	3,530	6,760	1.07	1.23
June	7,540	4,960	6,490	1.03	1.15
July	5,150	2,550	3,970	0.631	0.73
August	3,360	2,030	2,620	0.416	0.48
September	4,310	1,820	2,720	0.432	0.48
October	5,150	1,320	2,490	0.396	0.47
November	3,110	2,100	2,550	0.405	0.45
December	5,760	1,820	2,800	0.445	0.51
The year	22,500	.....	4,780	0.860	10.33
1906					
January	18,100	2,630	9,620	1.53	1.76
February	.....	.....	9,900	1.57	1.64
March	21,900	5,150	12,500	1.99	2.29
April	15,800	4,980	9,160	1.46	1.63
May	4,860	2,630	3,660	0.582	0.67
June	3,960	1,820	2,380	0,378	0.42
July (1–20)	3,360	1,820	2,410	0.383	0.28
October	2,400	1,380	1,720	0.273	0.31
November	6,400	1,560	2,630	0.418	0.47
December	5,060	2,030	3,320	0.528	0.61
1907					
January (1–28)	.....	3,360	6,940	1,10	1.15
February (18–28)	9,020	4,400	6,510	1.04	0.42
March	10,600	3,360	4,820	0.766	0.88
April	12,300	4,580	7,420	1.18	1.32
May	5,760	2,550	4,030	0.640	0.74
June	8,270	3,360	5,230	0.832	0.98
July	11,100	2,870	5,960	0.948	1.09
August	5,550	2,870	3,980	0.632	0.73
September	9,900	1,760	4,490	0.714	0.80
October	9,400	2,710	4,460	0.708	0.82
November	3,360	2,030	2,600	0.413	0.36
December	.....	.....	.....	.....	.....
1908					
Januray	3,030	.....	2,330	0.370	0.43
February	.....	.....	6,620	1.05	1.13
March	15,800	6,440	10,800	1,73	1.99
April	10,400	4,580	6,720	1.07	1.19
May	11,900	7,070	9,100	1,45	1.67
June	8,900	3,280	6,410	1.02	1.14
July	6,400	2,070	3,530	0.561	0.65
August	2,480	1,500	1,810	0.288	0.33
September	1,620	1,380	1,470	0.236	0.26
October	1,720	1,380	1,510	0.240	0.28
November	2,400	1,320	1,720	0.273	0.30
December	2,790	1,560	2,110	0.335	0.39
The year	15,800	.....	4,520	0.717	9.76
1909					
January	11,100	.....	4,010	0.638	0.74
February	13,700	4,040	7,520	1.20	1.25
March	12,200	5,450	8,590	1.37	1.58

ROCK RIVER NEAR NELSON, ILLINOIS

Location.—At the Chicago and Northwestern Railway bridge, about one one-quarter mile west of Nelson, Ill., and about two miles above the mouth of Threemile Branch.

Records available.—January 8 to July 21, 1906.

Drainage area.—Eight thousand six hundred and twenty square miles.

Gage.—Standard chain gage attached to downstream guardrail of bridge.

Channel.—Rocky and permanent.

Discharge measurements.—Made from downstream side of 5-span railroad bridge.

Floods.—No record of floods is available.

Accuracy.—The remains of old piers may affect the accuracy of discharge measurements to some extent. Backwater effect from the dam at Sterling is not supposed to reach the section.

DISCHARGE MEASUREMENTS OF ROCK RIVER NEAR NELSON, ILLINOIS, IN 1906

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1906		*Feet*	*Sq. ft.*	*Feet*	*Sec.-ft.*
May 4	M. S. Brennan	621	3,020	6.19	5,380
June 5	A. H. Horton	602	2,260	5.02	2,720
June 30	A. H. Horton	615	2,920	6.12	5,190

DAILY GAGE HEIGHT, IN FEET, OF ROCK RIVER NEAR NELSON, ILLINOIS, FOR 1906

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1906												
1							6.2					
2							5.6					
3							5.6					
4							5.5					
5							5.6					
6							5.3					
7							5.2					
8						5.2	5.1					
9						5.05	5.0					
10						5.0	4.8					
11						4.75	4.9					
12						4.65	4.9					
13						4.85	4.7					
14						4.9	4.7					
15						4.8	4.7					
16						4.7	4.7					
17						4.65	4.6					
18						4.55	4.7					
19						4.35	4.5					
20						4.85	4.5					
21						5.0	4.6					
22						5.0						
23						4.8						
24						4.85						
25						4.7						
26						4.8						
27						4.85						
28						8.0						
29						6.4						
30						6.15						

ROCK RIVER AT STERLING, ILLINOIS

Location.—At highway bridge in Sterling, Ill., about one-half mile below the dam of the Sterling Manufacturing Company, and five miles above the mouth of Elkhorn Creek.

Records available.—January 5, 1905, to March 3, 1906.

Drainage area.—Eight thousand seven hundred and forty square miles.

Channel.—There are two channels at all stages, separated by an island which is partly submerged at high stages. The highway embankment, however, does not overflow. Both channels are composed of gravel, free from vegetation, and are permanent.

Gage.—A standard chain gage is attached to each bridge. The datum of the gage at the left channel is 0.48 foot below that on the right channel. Both datums have remained unchanged. The gages at this station were destroyed when the bridges were carried away by an ice gorge in February, 1906.

Discharge measurements.—Made from upstream side of 5-span bridge over right channel, and 3-span bridge over left channel.

Winter flow.—Ice conditions at intervals during December, January, February, and March, may affect the relation between gage height and discharge. Ice gorges occur below the station and cause backwater at the gages.

Regulation.—The dam and power plant above the station may affect the flow at low stages.

DISCHARGE MEASUREMENTS OF ROCK RIVER (NORTH CHANNEL) AT STERLING, ILLINOIS, IN 1905–1906

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1905		*Feet*	*Sq.-ft.*	*Feet.*	*Sec.-ft.*
*March 11	Hanna and Clapp	566	2,668	8.90	7,063
March 24	Hanna and Brennan	602	3,649	10.71	14,270
April 28	M. S. Brennan	536	1,608	7.09	4,398
June 16	F. W. Hanna	554	1,792	7.46	5,206
August 11	F. W. Hanna	549	881	5.80	1,681
September 15	F. W. Hanna	550	1,007	6.05	2,118
1906					
†January 16	M. S. Brennan	553	1,780	7.40	3,370

* One channel blocked with ice.
† Ice conditions.

DISCHARGE MEASUREMENTS OF ROCK RIVER (SOUTH CHANNEL) AT STERLING, ILLINOIS, IN 1905–1906

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1905		*Feet*	*Sq.-ft.*	*Feet*	*Sec.-ft.*
March 11	Hanna and Clapp	286	1,534	9.13	3,645
March 24	Hanna and Brennan	300	2,186	10.98	7,934
April 28	M. S. Brennan	290	1,020	7.28	2,723
June 16	F. W. Hanna	284	1,068	7.59	3,087
August 11	F. W. Hanna	272	589	5.76	1,300
September 15	F. W. Hanna	278	635	6.04	1,374
1906					
*January 16	M. S. Brennan	282	1,220	8.20	2,300

* Ice conditions.

DAILY GAGE HEIGHT, IN FEET, OF ROCK RIVER (NORTH CHANNEL) AT STERLING, ILLINOIS, FOR 1905-1906

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1905												
1	.....	7.05	7.25	10.7	7.05	6.95	6.85	6.05	5.9	5.7	5.98	5.93
2	.....	7.05	7.25	10.1	6.95	6.95	6.8	6.03	6.0	5.69	5.94	5.98
3	.....	7.05	9.3	9.9	6.9	6.9	6.8	5.84	6.05	5.6	5.92	6.05
4	.....	7.0	10.0	9.6	6.9	6.9	6.75	5.78	6.2	5.53	5.9	6.05
5	.....	7.0	9.8	9.4	6.55	6.9	6.7	5.73	6.3	5.51	5.84	6.1
6	6.5	7.0	9.7	9.1	6.5	8.7	6.7	5.7	6.3	5.49	5.8	6.05
7	6.6	7.0	9.6	9.0	6.3	8.6	6.65	5.76	6.4	5.42	5.77	6.1
8	6.9	6.9	9.3	8.9	6.25	7.8	6.6	5.84	6.5	5.42	5.74	6.1
9	7.1	6.9	9.3	8.7	6.25	7.8	6.65	5.82	6.6	5.4	5.74	6.1
10	7.8	6.9	9.3	8.7	6.4	7.8	6.65	5.8	6.7	5.4	5.73	6.0
11	7.8	6.9	9.2	8.5	9.8	7.9	6.65	5.78	6.65	5.38	5.71	6.0
12	7.1	7.0	8.0	8.3	10.6	7.7	6.65	5.76	6.6	5.36	5.72	5.98
13	7.1	7.0	7.9	8.3	10.4	7.8	6.65	5.84	6.6	5.36	5.7	5.98
14	7.1	7.0	7.9	8.2	10.2	7.7	6.7	5.82	6.6	5.34	5.7	5.98
15	7.1	7.0	7.9	8.1	9.7	7.6	6.75	5.78	6.55	5.3	5.74	5.94
16	7.1	7.0	7.9	7.7	9.7	7.45	6.7	5.77	6.5	5.28	5.7	5.92
17	7.1	7.0	8.5	7.7	9.7	7.7	6.6	5.75	6.4	5.22	5.68	5.81
18	7.1	7.0	9.2	7.6	9.9	7.6	6.55	5.64	6.4	5.18	5.66	5.81
19	6.65	7.05	11.6	7.5	8.9	7.4	6.55	5.45	6.35	5.17	5.68	5.8
20	7.1	7.05	11.6	7.5	8.7	7.45	6.5	5.5	6.3	5.23	5.7	5.78
21	7.1	7.06	9.8	7.5	8.5	7.25	6.35	5.6	6.25	5.3	5.73	5.76
22	7.1	7.05	9.8	7.55	8.0	7.2	6.2	5.67	6.15	6.35	5.74	5.72
23	7.1	7.1	9.8	7.5	7.8	7.2	6.15	5.72	6.0	6.5	5.78	5.72
24	7.1	7.1	10.7	7.5	7.2	7.15	6.15	5.76	5.95	6.5	5.79	5.74
25	7.05	7.1	10.9	7.5	7.1	7.1	6.15	5.78	5.88	6.3	5.82	5.71
26	7.2	7.2	11.0	7.5	7.0	7.0	6.1	5.78	5.86	6.3	5.82	5.72
27	7.2	7.2	11.0	7.5	7.0	6.95	5.99	5.84	5.76	6.3	5.81	5.72
28	7.2	7.2	10.9	7.2	7.05	6.9	5.96	5.48	5.72	6.25	5.8	5.7
29	7.0	.....	10.8	7.1	7.05	6.9	5.97	5.91	5.7	6.15	5.85	5.8
30	7.0	.....	10.7	7.05	7.05	6.85	5.9	5.91	5.68	6.0	5.9	5.82
31	7.0	.....	10.7	.....	6.95	.....	6.1	5.9	.....	6.0	.....	5.8
1906												
1	6.04	14.71	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2	6.06	14.64	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
3	6.12	14.65	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4	6.12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5	6.12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
6	6.16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
7	6.38	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8	6.46	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
9	6.54	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
10	6.58	13.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
11	6.63	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
12	6.77	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
13	6.82	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
14	6.88	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
15	6.98	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
16	6.98	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
17	7.00	13.10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
18	6.98	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
19	6.98	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
20	7.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
21	9.20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
22	11.84	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
23	13.26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
24	14.38	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
25	15.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
26	15.45	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
27	15.52	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
28	15.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
29	15.19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
30	14.78	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
31	14.98	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

NOTE—1905. Channel frozen over January 10–March 7.
1906. Ice conditions during January and February, channel gorged with ice January 22–February 26. Bridge carried away February 25.

DAILY GAGE HEIGHT, IN FEET, OF ROCK RIVER (SOUTH CHANNEL) AT STERLING, ILLINOIS, FOR 1905-1906

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1905												
1	.....	6.6	7.25	10.9	7.25	7.05	6.9	6.0	6.0	5.67	5.95	6.0
2	.....	6.6	7.25	10.3	7.1	6.8	6.9	5.98	6.1	5.66	5.9	6.05
3	.....	6.6	9.3	10.1	7.0	6.75	6.9	5.81	6.05	5.58	5.88	6.15
4	.....	6.6	10.0	9.8	7.0	6.8	6.85	5.78	6.2	5.51	5.85	6.15
5	6.4	6.0	10.5	9.6	6.6	6.8	6.8	5.72	6.3	5.49	5.82	6.15
6	6.5	6.0	10.5	9.4	6.5	8.85	6.8	5.7	6.3	5.45	5.78	6.2
7	6.6	6.0	9.0	9.3	6.3	8.6	6.75	5.76	6.4	5.37	5.72	6.2
8	6.4	6.5	9.0	9.3	6.3	7.5	6.75	5.84	6.5	5.35	5.7	6.2
9	6.9	6.45	9.0	9.0	6.3	7.45	6.7	5.82	6.6	5.33	5.72	6.2
10	6.6	6.5	9.0	9.0	6.4	7.45	6.7	5.8	6.7	5.32	5.7	6.1
11	7.1	6.5	9.0	8.8	10.3	7.6	6.7	5.78	6.7	5.32	5.68	6.1
12	7.1	6.3	8.4	8.6	10.9	7.8	6.7	5.72	6.65	5.3	5.7	6.1
13	7.1	6.15	8.4	8.6	10.8	8.0	6.7	5.76	6.65	5.31	5.69	6.1
14	7.15	6.1	8.3	8.5	10.6	7.9	6.75	5.77	6.65	5.3	5.68	6.05
15	7.4	6.9	8.3	8.4	9.9	7.8	6.8	5.74	6.6	5.15	5.7	6.05
16	7.4	6.1	8.2	7.9	9.9	7.7	6.8	5.7	6.55	4.95	5.65	6.0
17	7.4	6.1	8.5	7.9	9.9	7.6	6.7	5.68	6.5	4.88	5.64	5.91
18	7.4	6.1	9.3	7.8	9.5	7.6	6.6	5.59	6.45	4.85	5.6	5.95
19	7.0	6.05	11.8	7.7	9.0	7.6	6.6	5.54	6.4	4.85	5.62	5.9
20	6.75	6.05	11.8	7.6	8.9	7.6	6.5	5.61	6.35	5.19	5.64	5.88
21	6.75	6.05	10.8	7.7	8.6	7.55	6.25	5.7	6.3	5.28	5.65	5.88
22	6.7	6.05	10.6	7.7	8.2	7.4	6.15	5.75	6.2	6.3	5.65	5.84
23	6.8	6.1	10.6	7.7	8.0	7.4	6.15	5.79	6.05	6.5	5.68	5.83
24	6.8	6.1	11.4	7.7	7.55	7.35	6.15	5.82	5.97	6.5	5.7	5.9
25	6.75	6.1	11.2	7.7	7.5	7.25	6.15	5.9	5.9	6.3	5.72	5.89
26	6.8	7.05	11.3	7.7	7.45	7.2	6.1	5.92	5.82	6.3	5.72	5.9
27	6.8	7.2	11.2	7.7	7.4	7.1	5.95	5.98	5.74	6.3	5.72	5.88
28	6.8	7.2	11.2	7.4	7.3	7.05	5.95	6.0	5.7	6.25	5.72	5.86
29	6.6	.....	11.0	7.3	7.3	7.0	5.95	6.0	5.68	6.15	5.94	5.95
30	6.6	.....	10.9	7.25	7.3	6.95	5.85	6.0	5.66	5.98	5.97	5.96
31	6.6	.....	11.0	.....	7.0	.....	6.05	6.0	.....	5.95	.....	5.96
1906												
1	5.88	15.72	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2	5.90	15.64	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
3	5.95	15.64	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4	5.98	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5	6.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
6	6.06	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
7	6.22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8	6.29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
9	6.36	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
10	6.40	14.10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
11	6.46	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
12	6.66	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
13	6.70	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
14	6.77	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
15	7.04	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
16	7.04	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
17	7.04	14.90	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
18	7.02	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
19	7.06	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
20	7.10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
31	9.32	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
22	11.94	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
23	13.52	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
24	14.78	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
25	16.30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
26	16.50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
27	16.50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
28	16.52	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
29	16.26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
30	15.66	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
31	15.69	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

NOTE—1905. Channel frozen over January 15–March 7.
1906. Ice conditions during January and February, channel gorged with ice January 22–February 26. Bridge carried away February 22.

RATING TABLE FOR ROCK RIVER AT STERLING, ILLINOIS, (NORTH CHANNEL), FROM JANUARY 1-DECEMBER 31, 1905

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
5.00	.....	6.80	3,700	8.60	8,110	10.40	13,380
5.10	560	6.90	3,920	8.70	8,380	10.50	13,690
5.20	710	7.00	4,145	8.80	8,650	10.60	14,000
5.30	860	7.10	4,375	8.90	8,920	10.70	14,310
5.40	1,020	7.20	4,605	9.00	9,200	10.80	14,620
5.50	1,180	7.30	4,835	9.10	9,480	10.90	14,630
5.60	1,340	7.40	5,070	9.20	9,760	11.00	15,240
5.70	1,510	7.50	5,310	9.30	10,060	11.10	15,550
5.80	1,680	7.60	5,550	9.40	10,340	11.20	15,860
5.90	1,860	7.70	5,795	9.50	10,640	11.30	16,170
6.00	2,050	7.80	6,045	9.60	10,930	11.40	16,480
6.10	2,245	7.90	6,295	9.70	11,230	11.50	16,790
6.20	2,445	8.00	6,550	9.80	11,530	11.60	17,100
6.30	2,645	8.10	6,810	9.90	11,830	11.70	17,410
6.40	2,850	8.20	7,070	10.00	12,140	11.80	17,720
6.50	3,060	8.30	7,330	10.10	12,450	11.90	18,030
6.60	3,270	8.40	7,590	10.20	12,760	12.00	18,340
6.70	3,485	8.50	7,850	10.30	13,070		

NOTE—The above table is not applicable for ice or obstructed channel conditions. It is based on five discharge measurements made during 1905 and is well defined between gage height 5.8 feet and 10.7 feet. This station is very accurately rated for 1905.

RATING TABLE FOR ROCK RIVER AT STERLING, ILLINOIS, (SOUTH CHANNEL), FROM JANUARY 1-DECEMBER 31, 1905

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
5.00	600	6.90	2,290	8.80	4,640	10.70	7,520
5.10	670	7.00	2,400	8.90	4,780	10.80	7,680
5.20	745	7.10	2,510	9.00	4,920	10.90	7,840
5.30	820	7.20	2,620	9.10	5,060	11.00	8,000
5.40	895	7.30	2,730	9.20	5,200	11.10	8,160
5.50	975	7.40	2,850	9.30	5,340	11.20	8,320
5.60	1,055	7.50	2,970	9.40	5,480	11.30	8,480
5.70	1,140	7.60	3,090	9.50	5,630	11.40	8,640
5.80	1,225	7.70	3,210	9.60	5,780	11.50	8,800
5.90	1,310	7.80	3,340	9.70	5,930	11.60	8,960
6.00	1,400	7.90	3,470	9.80	6,080	11.70	9,020
6.10	1,490	8.00	3,600	9.90	6,240	11.80	9,280
6.20	1,585	8.10	3,730	10.00	6,400	11.90	9,440
6.30	1,680	8.20	3,860	10.10	6,560	12.00	9,600
6.40	1,775	8.30	3,990	10.20	6,720	12.10	9,760
6.50	1,875	8.40	4,120	10.30	6,880	12.20	9,930
6.60	1,975	8.50	4,250	10.40	7,040	12.30	10,100
6.70	2,075	8.60	4,380	10.50	7,200	12.40	10,270
6.80	2.180	8.70	4,510	10.60	7,360		

NOTE—The above table is not applicable for ice or obstructed channel conditions. It is based on five discharge measurements made during 1905 and is well defined between gage heights 5.7 feet and 11.0 feet. This station is very accurately rated for 1905.

DAILY DISCHARGE IN SECOND-FEET OF ROCK RIVER AT STERLING, ILLINOIS, FOR 1905

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	.....	22,100	6,940	6,490	6,100	3,550	3,260	2,620	3,370	3,320
2	.....	.....	.....	19,300	6,540	6,210	5,990	3,490	3,540	2,590	3,250	3,450
3	.....	.....	.....	18,400	6,320	6,050	5,990	2,980	3,590	2,580	3,190	3,680
4	.....	.....	.....	17,000	6,320	6,100	5,820	2,860	4,020	2,210	3,130	3,680
5	.....	.....	.....	16,100	5,140	6,100	5,660	2,720	4,320	2,170	2,990	3,770
6	.....	.....	.....	15,000	4,940	13,100	5,660	2,650	4,320	2,090	2,890	3,730
7	.....	.....	.....	14,500	4,320	12,500	5,510	2,800	4,630	1,920	2,790	3,820

DAILY DISCHARGE IN SECOND-FEET, ROCK RIVER AT STERLING, ILLINOIS—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
8	.....	.....	14,900	14,300	4,220	9,010	5,400	3,010	4,940	1,910	2,720	3,820
9	.....	.....	14,900	13,300	4,220	8,950	5,460	2,960	5,250	1,860	2,740	3,820
10	.....	.....	14,900	13,300	4,630	8,950	5,460	2,900	5,560	1,860	2,700	3,540
11	.....	.....	14,700	12,500	18,400	9,390	5,460	2,860	5,460	1,820	2,650	3,540
12	.....	.....	10,700	11,700	21,800	9,140	5,460	2,770	5,290	1,780	2,680	3,500
13	.....	.....	10,400	11,700	21,100	9,640	5,460	2,940	5,290	1,780	2,640	3,500
14	.....	.....	10,300	11,300	20,200	9,270	5,610	2,920	5,290	1,740	2,630	3,450
15	.....	.....	10,300	10,900	17,400	8,890	5,770	2,820	5,140	1,570	2,720	3,380
16	.....	.....	10,200	9,270	17,400	8,400	5,660	2,770	4,980	1,400	2,610	3,300
17	.....	.....	12,100	9,270	17,400	8,890	5,350	2,720	4,730	1,260	2,570	3,020
18	.....	.....	15,100	8,890	17,400	8,640	5,140	2,460	4,670	1,180	2,500	3,060
19	.....	.....	26,400	8,520	13,800	8,160	5,140	2,110	4,530	1,160	2,550	2,990
20	.....	.....	26,400	8,400	13,200	8,280	4,940	2,240	4,370	1,490	2,600	2,940
21	.....	.....	19,200	8,520	12,200	7,750	4,380	2,480	4,220	1,660	2,660	2,900
22	.....	.....	18,900	8,640	10,400	7,450	3,970	2,640	3,920	4,430	2,680	2,800
23	.....	.....	18,900	8,520	9,640	7,450	3,870	2,760	3,490	4,940	2,770	2,790
24	.....	.....	22,900	8,520	7,630	7,280	3,870	2,850	3,330	4,940	2,800	2,890
25	.....	.....	23,200	8,520	7,350	7,060	3,870	2,960	3,130	4,320	2,880	2,830
26	.....	.....	23,700	8,520	7,150	6,760	3,730	2,980	3,030	4,320	2,880	2,850
27	.....	.....	21,900	8,520	6,990	6,540	3,390	3,130	2,780	4,320	2,860	2,830
28	.....	.....	21,600	7,450	6,990	6,380	3,330	2,550	2,680	4,170	2,840	2,790
29	.....	.....	22,600	7,110	6,990	6,320	3,350	3,280	2,630	3,880	3,120	3,040
30	.....	.....	22,100	6,940	6,990	6,150	3,130	3,280	2,580	3,430	3,230	3,080
31	.....	.....	22,300	.....	6,430	.....	3,680	3,260	.....	3,410	.....	3,040

NOTE—North and south channels combined. No estimate given for January 1–March 7 because of ice.

MONTHLY DISCHARGE OF ROCK RIVER AT STERLING, ILLINOIS, FOR 1905

[Drainage area, 8,740 square miles]

Month	Discharge in second-feet				Runoff—depth in inches on drainage area
	Maximum	Minimum	Mean	Per square mile	
March (8–31)	26,400	10,200	17,800	2.04	1.82
April	22,200	6,940	11,600	1.33	1.48
May	21,800	4,220	10,300	1.18	1.36
June	13,100	6,050	8,040	.920	1.03
July	6,100	3,130	4,890	.559	.64
August	3,550	2,110	2,860	.327	.38
September	5,560	2,580	4,170	.477	.53
October	4,940	1,160	2,600	.297	.34
November	3,570	2,500	2,820	.322	.36
December	3,820	2,790	3,260	.373	.43

NOTES—North and south channel combined.
No estimate given from January 1–March 7, because of ice conditions.
These data are published to the nearest three significant figures only, and consequently some of the values may differ from those as published in United States Geological Survey Water Supply Paper No. 171. The drainage area here given is more accurate than any previously published.

ILLINOIS RIVER DRAINAGE BASIN

GENERAL FEATURES

Illinois River, the most extensive of all the tributaries of the upper Mississippi, is formed by the union of the Desplaines and Kankakee rivers in Grundy County, Illinois, flows southwesterly across the State and enters the Mississippi at Grafton, about 24 miles above the mouth of the Missouri. Its drainage area of 28,210 square miles is distributed among three states, Illinois, Indiana, and Wisconsin; 24,040 square

miles are in Illinois, extending in a broad band 250 miles long, and averaging 100 miles in width, directly across the center of the State in a northeast-southwest direction; 1,020 square miles are in Wisconsin, extending north from the Illinois area; and 3,140 square miles are in Indiana, projecting east from the same area. The length, from the junction of the Kankakee and Desplaines to the mouth, is 267 miles. The most important tributaries are Fox, Vermilion, Mackinaw, Spoon, and Sangamon rivers, and Crooked and Macoupin creeks.

The basin is level or undulating, the soil composed of glacial drift. In the broad strip across Illinois the soil is a rich black loam and comprises some of the best farming land in the United States. The portion of the basin in Indiana is swampy.

The Illinois River is important as an inland water route. In 1848 the Illinois and Michigan Canal was completed, starting from Lake Michigan at Chicago, entering the Desplaines Valley at Summit, crossing the Desplaines River at Joliet, and continuing along the right bank of the Desplaines and Illinois to Peru, where it enters the Illinois. From Peru to the mouth there is navigation, partly natural and partly by slack water from dams. This canal has now become nearly obsolete. The Chicago Drainage Canal, constructed as part of a deep waterway from the Lakes to the Gulf and for a sewage outlet for the city of Chicago, was opened in 1900. This canal consists of the dredging and enlarging of the South Branch of the Chicago River from its mouth to Robey Street, Chicago, the construction of a channel from that point to Lockport, a distance of 28 miles, and the deepening, enlarging, and leveling of the Desplaines River from Lockport to Joliet, so as to take care of the flow from the Drainage Canal in addition to the natural flow of the river. The flow in the Chicago Drainage Canal is limited by law to 10,000 second-feet. The flow up to the present time has been considerably less than this amount. Upon completion of the construction work in progress the flow will be in the neighborhood of the amount allowed by law.

There are practically no forested areas in the basin. The mean annual rainfall varies from 36 to 40 inches; the mean temperature varies from 48° to 52°. The winters are somewhat severe; ice forms on the streams from one-half to one foot thick at times. The average annual snowfall is about 32 inches in the northern section and about 24 inches in the southern section.

There are sites on the Fox and Kankakee valleys for storage reservoirs, but the cost of land which would be flooded prohibits their construction. There is considerable water power available in the basin, much of which is used. Various sites on the Illinois and Michigan Canal have been developed by allowing the water to flow from the canal into the Desplaines and Illinois rivers. The large flow from the Chicago Drainage Canal and the heavy fall between Lockport and Joliet and below Joliet furnish opportunities for large power developments. The greater part of the power at these sites has been developed by the Chicago Sanitary District.

ILLINOIS RIVER NEAR MINOOKA, ILLINOIS

Location.—At the Elgin, Joliet and Eastern Railroad bridge, a short distance below the Kankakee cut-off, six miles south of Minooka, Ill., two and one-half miles below the mouth of Kankakee River.

Records available.—January 1, 1903, to December 13, 1904.

Drainage area.—Six thousand six hundred and sixty square miles.

Gage.—Vertical staff gage attached to center pier of bridge. Graduations are in feet and tenths below the Chicago datum. Zero of Chicago datum is approximately 580.2 feet above sea level.

Channel.—Gravel, shifting on north side.

Discharge measurements.—Made from the bridge and from a boat and cable about 25 feet above the bridge.

Winter flow.—The river freezes over for considerable periods in December, January, February, and March, and affects the relation between gage height and discharge.

Regulation.—The flow at this station includes the flow from the Chicago Drainage Canal.

DISCHARGE MEASUREMENTS OF ILLINOIS RIVER NEAR MINOOKA, ILLINOIS, IN 1903 AND 1904

Date	Hydrographer	Width	Area of section	Mean velocity	Gage height[1]	Discharge
1903		*Feet*	*Sq. feet*	*Ft. per sec.*	*Feet*	*Sec.-feet*
March 15	E. H. Heilbron	630	9,182	2.80	86.84	25,690
April 19	E. H. Heilbron	594	6,604	2.04	91.12	13,480
May 10	E. H. Heilbron	553	4,893	1.03	94.10	7,393
July 12	E. H. Heilbron	541	4,556	1.64	93.83	7,465
August 31	E. H. Heilbron	560	3,856	1.83	93.99	7,044
September 26	Johnson and Hanna	520	4,199	1.75	94.10	7,319
October 24	Johnson and Hanna	530	4,317	1.78	94.10	7,673
November 11	F. W. Hanna	513	4,466	1.70	94.15	7,596
1904						
March 26	E. H. Heilbron	948	14,800	4.40	78.50	64,880
March 27	E. H. Heilbron	682	12,980	3.85	79.98	50,920
April 3	E. H. Heilbron	622	11,230	3.30	82.40	37,120
April 17	E. H. Heilbron	580	6,937	2.44	89.63	16,930
April 26	E. H. Heilbron	584	7,740	2.62	88.15	20,310
May 2	E. H. Heilbron	560	6,454	2.46	90.51	15,890
May 19	E. H. Heilbron	565	5,140	1.91	93.00	9,845

[1] All gage heights are negative, being below Chicago datum, and therefor a decrease in gage height means an increase in stage and vice versa.

DAILY GAGE HEIGHT, IN FEET, OF ILLINOIS RIVER NEAR MINOOKA, ILLINOIS, FOR 1903-04

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903												
1	90.62	.....	.....	91.86	91.77	92.63	94.18	93.12	94.29	94.20	93.92	93.98
2	89.87	.....	.....	92.05	91.96	92.69	94.34	93.98	94.40	94.17	93.85	93.83
3	89.65	.....	.....	92.13	92.02	92.91	94.30	94.13	94.32	94.25	94.09	93.78
4	89.72	.....	.....	91.91	92.23	92.78	94.34	94.07	94.44	94.12	94.14	93.71
5	89.25	.....	.....	90.85	92.36	92.19	.....	93.63	94.45	93.90	94.21	94.30
6	89.38	.....	.....	89.90	92.60	91.04	94.30	93.24	94.67	93.87	94.18	93.60
7	87.45	.....	.....	89.85	92.95	91.07	94.36	93.08	94.63	93.83	94.22	93.58
8	.....	.....	.....	90.62	93.00	91.36	94.32	93.55	94.64	93.61	94.25	93.68
9	82.98	.....	.....	91.05	92.99	91.83	94.20	92.70	94.60	93.36	94.25	93.88
10	83.58	.....	.....	91.36	.....	92.33	93.69	93.84	94.09	93.37	94.15	93.92
11	84.18	.....	.....	87.80	93.12	92.67	93.58	94.00	93.39	.....	94.13	93.79
12	84.69	.....	.....	86.13	.....	93.04	93.86	94.23	94.11	.....	94.20	93.72
13	85.20	.....	.....	85.78	93.31	93.26	93.90	94.30	94.26	.....	94.23	92.42
14	85.64	.....	.....	84.02	93.46	93.43	93.97	94.30	94.00	93.75	94.27	92.20

DAILY GAGE HEIGHT, OF ILLINOIS RIVER NEAR MINOOKA, ILLINOIS—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903												
15	.....	.....	86.62	82.89	93.55	93.48	94.05	94.18	92.79	93.83	94.88	91.84
16	.....	.....	87.33	83.31	93.76	93.79	94.17	94.45	90.36	93.78	94.22	92.94
17	.....	.....	88.03	83.87	93.85	93.98	94.26	94.53	90.99	93.88	94.20	92.68
18	.....	.....	88.37	84.75	93.84	93.98	92.85	94.65	91.78	93.83	94.43	92.86
19	.....	.....	88.78	85.84	93.94	94.03	92.80	94.65	92.12	93.98	94.45	92.68
20	.....	.....	88.35	86.77	93.95	94.00	93.47	94.55	92.53	93.93	94.20	90.84
21	.....	.....	86.95	87.55	93.97	94.11	94.04	94.58	93.01	93.83	94.41	90.93
22	.....	.....	87.22	88.75	93.78	94.05	.....	94.61	93.32	93.91	93.52	90.84
23	.....	.....	87.72	89.26	93.79	94.05	94.05	94.56	93.56	93.93	93.36	91.00
24	.....	.....	88.45	89.73	93.62	94.13	94.12	94.51	93.73	93.97	93.42	90.84
25	.....	.....	89.25	90.10	93.43	94.22	94.32	94.53	93.89	94.06	94.20	90.83
26	.....	.....	89.89	90.41	93.19	94.27	94.38	94.64	94.03	93.98	94.23	91.31
27	.....	.....	90.30	90.46	93.52	94.34	94.29	94.48	94.00	93.95	94.05	91.18
28	.....	.....	90.72	90.63	92.47	94.37	94.33	93.94	94.10	93.98	94.10	91.18
29	.....	.....	91.00	91.18	92.57	94.39	94.30	94.05	94.10	94.05	94.33	91.10
30	.....	.....	91.27	91.42	92.71	94.40	94.21	94.30	94.20	94.01	93.98	91.30
31	.....	.....	91.50	.....	92.78	.....	93.65	91.23	.....	93.99	.....	91.04
1904												
1	[2]91.89	90.20	83.71	81.60	90.00	92.76	94.65	94.65	.....	93.75	95.05	94.65
2	91.83	90.79	83.21	81.50	90.53	92.88	94.59	94.70	.....	93.75	95.05	94.60
3	91.79	90.80	81.38	82.37	91.02	92.95	94.65	94.70	94.58	94.20	94.92	94.60
4	91.85	90.80	81.75	83.17	91.42	93.10	.....	94.75	94.75	94.40	94.53	94.35
5	92.00	90.98	82.52	84.02	91.68	93.11	94.44	94.70	94.75	94.55	94.55	94.32
6	91.94	90.08	83.38	84.97	91.85	93.30	94.42	94.58	94.75	94.70	95.00	94.40
7	91.79	85.36	82.68	85.80	91.98	93.42	94.48	94.70	94.80	94.80	94.57	94.27
8	91.80	85.10	82.78	86.20	92.11	93.48	94.55	94.70	94.75	94.90	94.75	94.27
9	91.75	85.95	84.90	86.12	91.78	93.90	93.98	94.75	95.00	94.80	94.55	94.28
10	91.62	86.14	85.35	86.27	91.60	94.10	93.82	94.75	95.08	95.00	91.53	95.05
11	91.48	86.68	85.72	86.47	91.74	94.24	*	94.80	95.05	94.75	94.45	94.50
12	91.41	87.64	86.56	86.85	91.92	94.26	.....	94.70	95.00	94.90	94.55	94.25
13	91.81	88.49	87.58	87.41	92.25	94.36	.....	94.75	95.05	94.80	94.47	94.40
14	92.50	88.92	87.85	87.98	92.45	94.88	.....	94.87	95.15	94.95	94.48	94.35
15	92.09	89.67	88.48	88.42	92.56	94.68	.....	94.80	95.20	94.40	94.37	.....
16	91.87	90.08	88.52	89.17	92.68	94.27	.....	94.77	95.40	94.35	94.47	.....
17	91.89	90.12	88.54	89.65	92.90	94.76	.....	94.75	95.20	94.35	94.43	.....
18	91.80	90.45	88.51	90.02	92.92	94.65	.....	94.70	93.25	94.85	94.45	.....
19	91.91	90.76	85.21	90.30	93.03	94.60	.....	94.80	94.15	95.00	94.47	.....
20	91.49	90.67	[2]82.80	90.85	93.12	94.72	.....	*	94.90	95.00	94.48	.....
21	86.95	90.70	83.37	91.15	93.29	94.68	.....	.....	95.10	95.05	94.52	.....
22	83.35	90.90	82.01	91.35	93.39	94.55	.....	.....	95.10	94.90	94.52	.....
23	83.40	90.95	80.66	91.48	93.34	94.90	.....	.....	95.20	95.10	94.48	.....
24	84.90	90.88	81.21	90.60	93.47	95.02	.....	.....	95.05	95.10	94.53	.....
25	85.65	90.89	79.52	90.42	93.44	94.92	.....	.....	95.00	95.00	94.45	.....
26	86.14	90.81	78.50	88.82	93.46	94.85	.....	.....	94.55	95.00	94.45	.....
27	87.24	90.62	80.02	87.08	93.55	95.00	.....	.....	94.70	95.00	95.20	.....
28	88.38	90.53	81.25	87.50	93.51	94.84	.....	.....	93.95	94.05	95.30	.....
29	89.11	88.65	82.24	88.27	93.50	94.76	.....	.....	92.85	95.07	95.07	.....
30	89.45	.....	83.12	89.22	93.28	94.62	.....	.....	93.60	94.95	94.95	.....
31	89.73	.....	82.94	.....	92.96	.....	.....	.....	.....	95.05	.....	.....

[1] All gage heights here given of this river are below the Chicago datum, and therefore a decrease in gage height means an increase in stage.
[2] River frozen January 1 to about March 20. Ice varies in thickness from 0.5 to 2 feet.
* Observer absent.

RATING TABLE FOR ILLINOIS RIVER NEAR MINOOKA, ILLINOIS, FROM JANUARY 1, 1903–DECEMBER 31, 1904

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
95.0	6,320	93.8	8,225	92.2	11,110	89.8	16,120
94.9	6,470	93.7	8,395	92.0	11,510	89.6	16,560
94.8	6,620	93.6	8,565	91.8	11,910	89.4	17,020
94.7	6,770	93.5	8,735	91.6	12,310	89.2	17,480
94.6	6,925	93.4	8,905	91.4	12,710	89.0	17,960
94.5	7,080	93.3	9,075	91.2	13,110	88.5	19,210
94.4	7,240	93.2	9,245	91.0	13,530	88.0	20,510
94.3	7,400	93.1	9,415	90.8	13,950	87.5	21,820
94.2	7,560	93.0	9,590	90.6	14,370	87.0	23,180
94.1	7,720	92.8	9,950	90.4	14,800	86.5	24,590
94.0	7,885	92.6	10,330	90.2	15,240	86.0	26,040
93.9	8,055	92.4	10,710	90.0	15,680	85.5	27,550

RATING TABLE FOR ILLINOIS RIVER NEAR MINOOKA, ILLINOIS—*Concluded*

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
85.0	29,120	83.5	34,200	82.0	39,820	79.0	59,010
84.5	30,750	83.0	36,000	81.0	44,010		
84.0	32,440	82.5	37,880	80.0	49,910		

NOTE—This table is not applicable to ice or obstructed channel conditions. It is based on fifteen discharge measurements made during 1903–04. Gage heights are below Chicago datum and therefor an increase in gage heights means a decrease in stage and vice versa. The table is well defined between gage heights 94.0 and 87.0 feet. Above 79.5 feet the curve is a tangent the difference being 1,200 second-feet per tenth.

DAILY DISCHARGE IN SECOND-FEET, ILLINOIS RIVER NEAR MINOOKA, ILLINOIS, FOR 1903–04

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903												
1	14,300	.....	.....	11,800	12,000	10,300	7,110	9,380	7,420	7,560	8,020	7,920
2	16,000	.....	.....	11,400	11,600	10,100	7,340	7,920	7,240	7,610	8,140	8,170
3	16,400	.....	.....	11,200	11,500	9,250	7,400	7,670	7,370	7,480	7,740	8,260
4	16,300	.....	.....	11,700	11,000	9,990	7,340	7,770	7,180	7,690	7,660	8,380
5	17,400	.....	.....	13,800	10,800	11,100	7,370	8,510	7,160	8,060	7,540	7,400
6	17,100	.....	.....	15,900	10,300	13,400	7,400	9,180	6,820	8,110	7,590	8,560
7	22,000	.....	.....	16,000	9,680	13,400	7,300	9,450	6,880	8,170	7,530	8,600
8	29,000	.....	.....	14,300	9,590	12,800	7,370	8,650	6,860	8,550	7,480	8,430
9	36,100	.....	.....	13,400	9,570	11,800	7,560	10,100	6,920	8,970	7,480	8,090
10	33,900	.....	.....	12,800	9,480	10,800	8,410	8,160	7,740	8,960	7,640	8,020
11	31,700	.....	.....	21,000	9,380	10,200	8,600	7,880	8,920	8,790	7,670	8,240
12	30,100	.....	.....	25,700	9,220	9,520	8,120	7,510	7,700	8,630	7,560	8,360
13	28,500	.....	.....	26,700	9,060	9,140	8,060	7,400	7,460	8,470	7,510	10,700
14	27,100	.....	.....	32,400	8,800	8,850	8,040	7,400	7,880	8,310	7,450	11,100
15	.....	.....	24,200	36,400	8,650	8,770	7,800	7,590	9,970	8,170	6,500	11,800
16	.....	.....	22,300	34,900	8,290	8,240	7,610	7,160	14,900	8,260	7,530	9,700
17	.....	.....	20,400	32,900	8,140	7,920	7,460	7,030	13,500	8,090	7,560	10,200
18	.....	.....	19,500	29,900	8,160	7,920	9,860	6,850	11,900	8,170	7,190	9,840
19	.....	.....	18,500	24,500	7,990	7,840	9,950	6,850	11,300	7,920	7,160	10,100
20	.....	.....	19,600	23,800	7,970	7,880	8,790	7,010	10,500	8,000	7,560	13,900
21	.....	.....	23,300	21,700	7,940	7,700	7,820	6,960	9,570	8,170	7,220	13,700
22	.....	.....	22,600	18,600	8,260	7,800	7,810	6,910	9,040	8,040	8,700	13,900
23	.....	.....	21,200	17,300	8,240	7,800	7,800	6,990	8,630	8,000	8,970	13,500
24	.....	.....	19,300	16,300	8,530	7,670	7,690	7,060	8,340	7,940	8,870	13,900
25	.....	.....	17,400	15,500	8,850	7,530	7,370	7,030	8,070	7,790	7,560	13,900
26	.....	.....	16,000	14,800	9,260	7,450	7,270	6,860	7,840	7,920	7,510	12,900
27	.....	.....	15,000	14,700	8,700	7,340	7,420	7,110	7,880	7,970	7,800	13,200
28	.....	.....	14,100	14,300	10,600	7,290	7,350	7,990	7,720	7,920	7,720	13,300
29	.....	.....	13,500	13,100	10,400	7,220	7,400	7,800	7,720	7,800	7,350	13,300
30	.....	.....	13,000	12,700	10,100	7,240	7,540	7,400	7,560	7,870	7,920	12,900
31	.....	.....	10,500	.....	9,990	.....	8,480	7,510	.....	7,900	.....	13,400
1904												
1	.....	.....	.....	41,400	15,700	9,950	6,920	6,920	.....	8,220	6,320	6,920
2	.....	.....	.....	41,900	14,600	9,770	6,920	6,770	.....	8,230	6,320	6,920
3	.....	.....	.....	38,300	13,500	9,590	6,920	6,770	6,920	7,560	6,470	6,920
4	.....	.....	.....	35,300	12,700	9,420	7,080	6,620	6,620	7,240	7,080	7,240
5	.....	.....	.....	32,400	12,100	9,420	7,240	6,770	6,620	6,920	6,920	7,400
6	.....	.....	.....	29,100	11,900	9,080	7,240	6,920	6,620	6,770	6,320	7,240
7	.....	.....	.....	26,600	11,500	8,900	7,080	6,770	6,620	6,020	6,920	7,400
8	.....	.....	.....	25,500	11,300	8,740	6,920	6,770	6,620	6,470	6,620	7,400
9	.....	.....	.....	25,800	11,900	8,060	7,880	6,620	6,320	6,620	6,920	7,400
10	.....	.....	.....	25,200	12,300	7,720	8,220	6,620	6,170	6,320	7,080	6,320
11	.....	.....	.....	24,600	12,100	7,560	.....	6,620	6,320	6,620	7,240	7,080
12	.....	.....	.....	23,700	11,700	7,400	.....	6,770	6,320	6,470	6,920	7,560
13	.....	.....	.....	22,100	11,100	7,240	.....	6,620	6,320	6,620	7,080	7,240
14	.....	.....	.....	20,500	10,700	6,470	.....	6,470	6,020	6,320	7,080	7,240
15	.....	.....	.....	19,500	10,300	6,770	.....	6,020	6,020	7,240	7,240	.....
16	.....	.....	.....	17,500	10,100	7,400	.....	6,620	5,720	7,240	7,080	.....
17	.....	.....	.....	16,600	9,770	6,620	.....	6,620	6,020	7,240	7,240	.....
18	.....	.....	.....	15,700	9,770	6,920	.....	6,770	9,240	6,620	7,240	.....
19	.....	.....	.....	15,000	9,590	6,920	.....	6,620	7,560	6,320	7,080	.....
20	.....	.....	.....	14,000	9,420	6,770	.....	.....	6,470	6,320	7,080	.....
21	.....	.....	34,700	13,100	9,080	6,770	.....	.....	6,170	6,320	7,080	.....
22	.....	.....	39,800	12,700	8,900	6,920	.....	.....	6,170	6,470	7,080	.....
23	.....	.....	45,800	12,500	9,080	6,470	.....	.....	6,020	6,170	7,080	.....
24	.....	.....	43,100	14,400	8,740	6,320	.....	.....	6,320	6,170	7,080	.....
25	.....	.....	53,800	14,800	8,900	6,470	.....	.....	6,320	6,320	7,240	.....

DAILY DISCHARGE IN SECOND-FEET, ILLINOIS RIVER NEAR MINOOKA, ILLINOIS—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1904												
26			64,800	18,400	8,740	6,620			6,920	6,320	7,240	
27			49,800	22,900	8,560	6,320			6,770	6,320	6,020	
28			42,900	21,800	8,740	6,620			7,880	7,880	5,870	
29			38,900	19,700	8,740	6,620			9,950	6,170	6,170	
30			35,600	17,500	9,080	6,920			8,560	6,320	6,320	
31			36,200		9,590					6,320		

NOTE—Discharge interpolated for January 8, May 10, May 12, July 15, July 22, and October 11-13 1903. No estimates are given for January 15–March 14, 1903, and from January 1–March 20, 1904, because of ice. Discharge interpolated for July 4, 1904.

MONTHLY DISCHARGE OF ILLINOIS RIVER NEAR MINOOKA, ILLINOIS, FOR 1903–04

[Drainage area, 6,660 square miles]

Month	Discharge in second-feet				Runoff—depth in inches on drainage area
	Maximum	Minimum	Mean	Per square mile	
1903					
January (1–14)	36,100	14,300	24,000	3.60	1.87
March (15–31)	24,200	10,500	18,300	2.75	1.74
April	36,400	11,200	19,400	2.91	3.25
May	12,000	7,940	9,460	1.42	1.64
June	13,400	7,220	9,140	1.37	1.53
July	9,950	7,110	7,830	1.18	1.36
August	10,100	6,850	7,720	1.16	1.34
September	14,900	6,860	8,600	1.29	1.44
October	8,970	7,480	8,120	1.22	1.41
November	8,970	6,500	7,670	1.15	1.28
December	13,900	7,400	10,800	1.62	1.87
1904					
March (21–31)	64,800	34,700	44,100	6.62	2.71
April	41,900	12,500	22,600	3.39	3.78
May	15,700	8,560	10,700	1.61	1.86
June	9,950	6,320	7,560	1.14	1.27
July (1–10)			7,240	1.09	0.44
August (1–19)	6,920	6,470	6,700	1.01	0.71
September (3–30)	9,950	5,720	6,780	1.02	1.06
October	8,220	6,170	6,740	1.01	1.16
November	7,240	5,870	6,850	1.03	1.15
December (1–14)			7,160	1.08	0.56

NOTE—These data are published to the nearest three significant figures only, and because of this and because of using a more accurate drainage area, the values here given may differ from those as published in U. S. Geol. Survey Water Supply Papers Nos. 98 and 128.

ILLINOIS RIVER NEAR SENECA, ILLINOIS

Location.—At the Big Four Railroad bridge two miles from Seneca, Ill., nine miles below the mouth of Mazon River.

Records available.—March 10, 1903, to August 26, 1903.

Drainage area.—Seven thousand six hundred and eighty square miles.

Gage.—Vertical staff gage fastened to the center pier of bridge. Graduations in feet and tenths below Chicago datum. Zero of Chicago datum is approximately 580.2 feet above sea level..

Channel.—Bed composed of gravel and silt; probably permanent.

Discharge measurements.—Made from bridge.

Regulation.—The flow at this station includes the Chicago Drainage Canal.

The following discharge measurement was made by E. H. Heilbron: March 16, 1903. Gage height, 94.23 feet; discharge, 24,372 second-feet.

DAILY GAGE HEIGHT, IN FEET, OF ILLINOIS RIVER NEAR SENECA, ILLINOIS, FOR 1903

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1				97.72	98.10	98.38	99.91	99.60				
2				97.90	98.21	98.34	99.87	99.95				
3				98.00	98.19	98.53	99.90	99.78				
4				97.76	98.39	98.46	99.87	99.43				
5				96.96	98.50	98.11	99.80	99.40				
6				96.25	98.60	97.24	99.80	99.25				
7				96.18	98.80	97.05	99.90	99.00				
8				96.68	98.87	97.48	99.90	99.20				
9				96.98	98.90	97.78	99.90	99.35				
10			91.20	97.32	98.90	98.18	99.70	99.53				
11			91.70	96.58	98.97	98.48	99.30	99.63				
12			92.20	93.25	99.04	98.73	99.46	99.76				
13			93.62	93.15	99.11	98.95	99.62	99.91				
14			93.10	92.05	99.16	99.09	99.63	99.85				
15			93.64	90.35	99.27	99.18	99.68	99.93				
16			94.30	90.40	99.42	99.34	99.76	99.93				
17			94.72	91.55	99.50	99.50	99.81	99.99				
18			95.15	92.22	99.55	99.56	99.40	110.05				
19			95.46	93.03	99.62	99.58	98.75	110.20				
20			95.47	94.06	99.64	99.48	99.04	100.10				
21			97.70	94.96	99.63	99.47	99.33	100.55				
22			99.05	95.55	99.42	99.51	99.54	100.50				
23			94.55	95.59	99.45	99.50	99.65	101.00				
24			95.20	96.51	99.31	99.60	99.73	101.00				
25			95.70	96.70	99.26	99.68	99.82	101.00				
26			96.20	96.95	99.03	99.78	99.87	101.50				
27			96.50	97.08	98.96	99.81	99.90					
28			96.83	97.20	98.69	99.85	99.86					
29			99.05	97.57	98.55	99.90	99.92					
30			97.22	97.77	98.67	99.91	99.83					
31			97.43		98.50		99.56					

NOTE—Gage heights are below Chicago datum, and therefore an increase in gage height means a decrease in stage.

ILLINOIS RIVER AT OTTAWA, ILLINOIS

Location.—At the Chicago, Burlington and Quincy Railroad bridge, one-half mile below the mouth of Fox River and 200 feet below the highway bridge leading to Main Street, Ottawa, Ill.

Records available.—March 11, 1903, to February 21, 1904.

Drainage area.—Nine thousand four hundred and forty square miles.

Gage.—Originally a vertical staff gage, graduated to feet and tenths below the Chicago datum, and fastened to the bridge abutment. On November 1, 1903, this was replaced with a standard chain gage fastened to the bridge, and reading to the same datum. Zero of Chicago datum is 580.2 feet above sea level.

Channel.—Bed is gravel and somewhat shifting; broken by three piers.

Discharge measurements.—Made from upstream side of bridge.

Regulation.—The flow includes that from the Chicago Drainage Canal.

DISCHARGE MEASUREMENTS OF ILLINOIS RIVER AT OTTAWA, ILLINOIS, IN 1903–04

Date	Hydrographer	Width	Area of section	Mean velocity	Gage height[1]	Discharge
1903		*Feet*	*Sq.-ft.*	*Ft. per sec.*	*Feet*	*Sec.-ft.*
March 18	E. H. Heilbron	650	6,817	4.53	122.98	30,880
April 5	E. H. Heilbron	600	4,738	3.71	126.25	17,570
April 28	E. H. Heilbron	610	5,001	3.67	126.07	18,340
May 12	E. H. Heilbron	545	3,501	3.32	128.42	11,620
July 8	E. H. Heilbron	480	2,847	2.65	129.54	7,541
August 23	E. Johnson, Jr	660	2,924	2.62	129.57	7,668
September 25	Johnson and Hanna	560	3,466	3.35	128.35	11,590
October 12	Johnson and Hanna	553	3,609	3.75	127.88	13,540
November 12	F. W. Hanna	525	3,090	2.88	129.01	8,898
*December 12	F. W. Hanna	550	4,424	1.54	126.42	6,822
1904						
March 30	E. H. Heilbron	745	10,220	4.56	118.30	46,560
April 2	E. H. Heilbron	750	10,990	4.96	117.30	54,470
April 17	E. H. Heilbron	626	5,164	3.62	125.40	18,720
April 26	E. H. Heilbron	652	6,136	4.20	123.90	25,920
May 2	E. H. Heilbron	608	4,775	3.90	125.80	18,610
May 19	E. H. Heilbron	541	3,583	2.89	128.1	10,340

[1] Below Chicago datum.
* Ice jam.

DAILY GAGE HEIGHT, IN FEET, OF ILLINOIS RIVER AT OTTAWA, ILLINOIS, FOR 1903–1904

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903												
1				*	126.90	127.58	129.62	129.00	128.90	128.60	128.63	129.05
2				*	127.22	127.65	129.62	129.03	129.00	128.60	128.68	129.05
3				126.65	127.32	128.03	129.60	129.16	129.20	128.60	128.77	129.05
4				126.61	127.47	128.03	129.56	129.10	129.20	127.93	128.82	129.09
5				126.10	127.58	127.55	129.55	128.80	129.30	128.10	128.85	129.13
6				125.47	127.77	126.50	129.55	128.55	129.35	128.12	128.88	128.95
7				125.28	128.07	126.50	129.50	128.39	129.38	127.77	128.95	128.35
8				125.75	128.20	126.80	129.54	128.54	129.98	127.67	129.09	127.82
9				125.82	128.30	127.20	129.45	128.80	129.44	127.70	129.13	128.20
10				126.65	128.30	127.64	129.35	128.90	128.68	127.77	129.15	128.00
11			120.35	124.60	128.32	128.00	129.00	129.00	128.00	127.89	129.13	127.00
12			120.90	121.98	128.42	128.33	129.00	129.10	128.35	127.97	129.10	126.35
13			121.68	121.58	128.49	128.52	129.10	129.20	128.58	128.05	129.18	126.52
14			121.70	120.48	128.60	128.75	129.20	129.30	128.35	128.10	129.28	126.75
15			121.92	119.08	128.74	129.00	129.20	129.10	125.45	128.12	129.33	126.45
16			122.50	119.42	128.85	129.25	129.26	128.65	124.08	128.16	129.40	126.32
17			122.95	120.38	129.03	129.40	129.31	128.80	124.75	128.20	129.40	126.75
18			123.25	122.02	129.05	129.10	128.20	129.10	125.85	128.26	129.39	127.08
19			123.50	122.02	129.10	129.00	127.90	129.20	126.48	128.33	129.34	127.10
20			121.45	122.65	129.17	129.03	128.10	129.30	126.84	128.33	129.30	127.12
21			120.72	123.37	129.15	129.10	128.50	129.30	127.38	128.25	129.29	126.80
22			122.15	124.05	129.93	129.25	128.50	129.50	127.58	128.28	129.13	127.40
23			122.75	124.57	128.95	129.13	129.10	129.50	127.80	128.39	128.70	126.78
24			123.37	125.10	128.85	129.22	129.20	129.60	128.04	128.43	128.73	126.60
25			124.20	125.45	128.82	129.33	129.30	129.50	128.03	128.49	129.00	126.75
26			124.68	125.75	128.68	129.48	129.30	129.40	128.50	128.50	129.48	126.98
27			125.02	125.95	128.50	129.46	129.40	129.20	128.40	128.50	129.28	127.05
28			125.25	126.10	128.30	129.57	129.40	128.60	128.50	128.52	129.21	127.22
29			125.62	126.37	128.02	129.65	129.30	128.70	128.40	128.58	129.12	127.20
30			126.52	126.65	128.05	129.66	129.00	128.70	128.47	128.60	129.20	127.28
31			126.82		127.78		129.00	128.80		128.61		127.22
1904												
1	127.28	124.20										
2	127.22	124.20										
3	127.12	124.20										
4	126.90	124.20										
5	126.82	124.20										
6	126.80	123.45										
7	126.80	120.60										
8	126.85	118.60										
9	126.82	120.00										
10	126.80	120.30										
11	126.88	120.70										
12	126.85	121.30										
13	126.90	122.70										

[illegible] Gage Height in Feet of Illinois River at Ottawa, Illinois, for [illegible]—Concluded

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
14	[illegible]	122.39										
15	[illegible]	122.49										
16	[illegible]	122.39										
17	[illegible]	124.49										
18	[illegible]	124.49										
19	[illegible]	124.39										
20	[illegible]	124.39										
21	[illegible]	124.[illegible]										
22	[illegible]											
23	[illegible]											
24	[illegible]											
25	[illegible]											
26	[illegible]											
27	[illegible]											
28	122.39											
29	122.22											
30	122.29											
31	122.92											

*The gage height here given of this river are below the Chicago datum and therefor an increase in gage height means a decrease in stage.

Rating Table for Illinois River at Ottawa, Illinois, March 11 to December 31, 1903

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	Sec.-ft.	Feet.	Sec.-ft.	Feet	Sec.-ft.	Feet	Sec.-ft.
130.0	6,740	128.7	9,730	126.8	15,620	124.2	25,990
129.9	6,940	128.6	9,995	126.6	16,340	124.0	26,810
129.8	7,145	128.5	10,265	126.4	17,080	123.5	28,860
129.7	7,355	128.4	10,540	126.2	17,840	123.0	30,910
129.6	7,570	128.3	10,820	126.0	18,620	122.5	32,960
129.5	7,790	128.2	11,105	125.8	19,430	122.0	35,010
129.4	8,015	128.1	11,395	125.6	20,250	121.5	37,060
129.3	8,245	128.0	11,690	125.4	21,070	121.0	39,110
129.2	8,480	127.8	12,295	125.2	21,890	120.5	41,160
129.1	8,720	127.6	12,920	125.0	22,710	120.0	43,210
129.0	8,965	127.4	13,565	124.8	23,530	119.0	47,310
128.9	9,215	127.2	14,230	124.6	24,350		
128.8	9,470	127.0	14,920	124.4	25,170		

Note. The above table is not applicable to ice or obstructed channel conditions. It is based on 16 discharge measurements made during 1903-04 and is well defined between gage heights 129.6 and 123.9 feet. Gage heights are below Chicago datum and therefor an increase in gage height means a decrease in stage and vice versa.

Daily Discharge in Second-feet of Illinois River at Ottawa, Illinois, for 1903

Day	Jan	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1				16,000	15,500	13,400	7,460	9,100	9,400	10,300	10,200	8,960
2				16,200	14,500	13,200	7,460	9,010	9,100	10,300	10,100	8,960
3				16,300	14,200	12,000	7,510	8,640	8,530	10,300	9,790	8,960
4				16,400	13,700	12,000	7,610	8,810	8,530	12,300	9,640	8,840
5				18,000	13,400	13,500	7,630	9,700	8,260	11,800	9,550	8,730
6				20,200	12,800	16,800	7,630	10,400	8,130	11,700	9,460	9,250
7				20,800	11,900	16,800	7,750	10,900	8,050	12,800	9,250	11,000
8				19,200	11,500	15,800	7,650	10,500	6,690	13,100	8,840	12,700
9				19,000	11,200	14,600	7,880	9,700	7,900	13,000	8,730	11,500
10				16,300	11,200	13,200	8,130	9,400	10,100	12,800	8,670	12,100
11			40,100	23,300	11,100	12,100	9,100	9,100	12,100	12,500	8,730	15,200
12			37,700	33,400	10,800	11,100	9,100	8,810	11,000	12,200	8,810	17,200
13			34,600	34,900	10,700	10,500	8,810	8,530	10,400	12,000	8,590	16,700
14			34,500	39,500	10,300	9,850	8,530	8,260	11,000	11,800	8,310	16,000
15			33,600	45,900	9,880	9,100	8,530	8,810	20,200	11,700	8,180	16,900

DAILY DISCHARGE IN SECOND-FEET, ILLINOIS RIVER AT OTTAWA, ILLINOIS, FOR 1903—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	.....	.....	31,300	44,300	9,550	8,400	8,370	10,200	25,200	11,600	8,000	17,300
17	.....	.....	29,600	40,000	9,010	8,000	8,230	9,700	22,700	11,500	8,000	16,000
18	.....	.....	28,400	33,200	8,960	8,810	11,500	8,810	18,900	11,300	8,030	15,000
19	.....	.....	27,400	33,200	8,810	9,100	12,400	8,530	16,800	11,100	8,160	14,900
20	.....	.....	35,500	30,700	8,610	9,010	11,800	8,260	15,700	11,100	8,260	14,800
21	.....	.....	38,500	27,900	8,670	8,810	10,600	8,260	14,000	11,400	8,290	15,800
22	.....	.....	32,700	25,400	6,790	8,400	10,600	7,750	13,400	11,300	8,730	14,000
23	.....	.....	30,400	23,400	9,250	8,730	8,810	7,750	12,700	10,900	10,000	15,900
24	.....	.....	27,900	21,500	9,550	8,480	8,530	7,510	12,000	10,800	9,910	16,400
25	.....	.....	24,800	20,200	9,640	8,180	8,260	7,750	12,000	10,600	9,100	16,000
26	.....	.....	23,000	19,200	10,100	7,800	8,260	8,000	10,600	10,600	7,800	15,300
27	.....	.....	21,700	18,500	10,600	7,850	8,000	8,530	10,900	10,600	8,310	15,000
28	.....	.....	20,900	18,000	11,200	7,580	8,000	10,300	10,600	10,500	8,500	14,500
29	.....	.....	19,700	17,200	12,000	7,400	8,260	10,000	10,900	10,400	8,750	14,600
30	.....	.....	16,700	16,300	12,000	7,370	9,100	10,000	10,700	10,300	8,530	14,300
31	.....	.....	15,800	.....	12,800	.....	9,100	9,700	.....	10,300	.....	14,500

NOTE—Discharge interpolated for April 1 and 2.

MONTHLY DISCHARGE OF ILLINOIS RIVER AT OTTAWA, ILLINOIS, FOR 1903

[Drainage area, 9,440 square miles]

Month	Discharge in second-feet				Runoff—depth in inches on drainage area
	Maximum	Minimum	Mean	Per sq. mile	
March (11-31)	40,100	15,800	28,800	3.05	2.38
April	45,900	16,000	24,800	2.63	2.90
May	15,500	6,790	10,600	1.12	1.29
June	16,800	7,370	10,600	1.12	1.25
July	12,400	7,460	8,480	.898	1.03
August	10,900	7,750	9,060	.960	1.11
September	25,200	6,690	12,200	1.29	1.44
October	13,100	10,300	11,400	1.21	1.40
November	10,200	8,000	8,840	.936	1.04
December	17,300	8,730	13,800	1.46	1.68

NOTE—No estimates of discharge are given for January and February, 1904, because of ice conditions. These data differ from those previously published in U. S. Geol. Survey Water Supply papers Nos. 98 and 128 because of a revision of the rating curve on account of later measurements, and because a more accurate value for the drainage area is used in this report.

ILLINOIS RIVER NEAR LASALLE, ILLINOIS

Location.—At the highway bridge at LaSalle, Ill., one mile below the mouth of Vermilion River.

Records available.—April 1 to May 23, and July 8 to September 14, 1903.

Drainage area.—Eleven thousand and fifty square miles.

Gage.—Originally a vertical staff gage, graduated to feet and tenths below the Chicago datum, and fastened to the southwest corner of the south pier of the bridge. A standard chain gage was installed May 12, 1903, reading the same as the staff gage. Zero of the Chicago datum is 580.2 feet above sea level.

Channel.—Gravel; probably permanent; broken by five piers.

Discharge measurements.—Made from the upstream side of bridge.

Regulation.—The flow at this station includes the Chicago Drainage Canal.

DISCHARGE MEASUREMENTS OF ILLINOIS RIVER NEAR LAS ALLE, ILLINOIS, IN 1903

Date		Hydrographer.	Gage height	Discharge
			Feet	*Second-feet*
March	17	E. H. Heilbron	129.70	32,006
April	4	E. H. Heilbron	133.60	17,638
April	28	E. H. Heilbron	132.55	17,884
May	12	E. H. Heilbron	136.50	11,110
July	7	E. H. Heilbron	139.85	7,221
July	15	E. C. Murphy	139.55	8,123
August	23	E. Johnson, Jr	140.03	7,448

DAILY GAGE HEIGHT, IN FEET, OF ILLINOIS RIVER NEAR LASALLE, ILLINOIS, FOR 1903

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1				133.03	133.75			139.50	139.20			
2				133.28				139.58	139.30			
3				133.45	133.95			139.68	139.30			
4				133.60	134.30			139.73	139.50			
5				132.20	134.87			139.35	139.60			
6				133.77	135.15			139.05	139.60			
7				133.65	135.45			138.85	139.80			
8				133.86	135.75		139.80	138.70	139.80			
9				133.28	135.95		139.80	139.00	139.80			
10				132.72	136.18		139.80	139.20	139.00			
11				132.50	136.30		139.40	139.30	138.40			
12				130.25	136.25		139.28	139.50	138.20			
13				129.72	136.65		139.32	139.70	138.50			
14				128.87	136.85		139.48	139.70	138.30			
15				129.55	137.03		139.58	139.70				
16				127.50	137.14		139.68	139.20				
17				127.70	137.45		139.78	139.40				
18				128.15			139.00	139.60				
19				128.50	137.65		138.30	139.80				
20				129.00	137.90		138.30	139.80				
21				129.54	138.05		138.75	139.90				
22				130.25	137.97		139.10	139.90				
23				130.28	138.04		139.30	140.03				
24				131.10			139.50	140.03				
25				131.70			139.60	139.90				
26				131.90			139.80	140.10				
27							139.90	139.70				
28							139.00	139.00	137.10			
29			131.90	132.85			139.90	138.70	137.20			
30							139.60	138.90	137.40			
31							139.60	139.08				

NOTE—Gage heights are below Chicago datum and therefor a decrease in gage height means an increase in stage, and vice versa.

RATING TABLE FOR ILLINOIS RIVER NEAR LASALLE, ILLINOIS, FROM APRIL 1 TO SEPTEMBER 30, 1903

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
140.0	7,400	138.7	8,320	136.8	10,570	134.4	14,850
139.9	7,465	138.6	8,405	136.6	10,850	134.2	15,290
139.8	7,530	138.5	8,495	136.4	11,140	134.0	15,750
139.7	7,595	138.4	8,590	136.2	11,440	133.5	16,940
139.6	7,660	138.3	8,690	136.0	11,750	133.0	18,400
139.5	7,725	138.2	8,795	135.8	12,070	132.5	20,180
139.4	7,795	138.1	8,905	135.6	12,410	132.0	22,060
139.3	7,865	138.0	9,020	135.4	12,760	131.5	24,000
139.2	7,935	137.8	9,260	135.2	13,140	131.0	26,190
139.1	8,010	137.6	9,500	135.0	13,550	130.0	30,790
139.0	8,085	137.4	9,760	134.8	13,970	129.5	33,090
138.9	8,160	137.2	10,020	134.6	14,410	129.0	35,390
138.8	8,240	137.0	10,290				

NOTE—The above rating table is not applicable for ice or obstructed channel conditions. It is based on 9 discharge measurements made during 1903 and is fairly well defined. Gage heights are below Chicago datum and therefor a decrease in gage height means an increase in stage, and vice versa.

DAILY DISCHARGE IN SECOND-FEET OF ILLINOIS RIVER NEAR LASALLE, ILLINOIS, FOR 1903

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1				18,300	16,300			7,720	7,940			
2				17,600	16,100			7,670	7,860			
3				17,100	15,900			7,610	7,860			
4				16,700	15,000			7,580	7,720			
5				21,300	13,800			7,830	7,660			
6				16,300	13,400			8,050	7,660			
7				16,600	12,700			8,200	7,530			
8				16,100	12,100		7,530	8,320	7,530			
9				17,500	11,800		7,530	8,080	7,530			
10				19,300	11,500		7,530	7,950	8,080			
11				2,0100	11,300		7,800	7,860	8,590			
12				29,600	11,100		7,880	7,720	8,800			
13				32,000	10,800		7,850	7,600	8,500			
14				36,000	10,500		7,740	7,600	8,690			
15				32,800	10,300		7,670	7,600				
16				42,300	10,100		7,610	7,940				
17				41,300	9,700		7,540	7,800				
18				39,300	9,570		8,080	7,660				
19				37,600	9,440		8,690	7,530				
20				35,400	9,164		8,690	7,530				
21				32,800	8,960		8,280	7,460				
22				29,600	9,040		8,010	7,460				
23				29,500	8,970		7,860	7,380				
24				25,700			7,720	7,380				
25				23,200			7,660	7,460				
26				22,500			7,530	7,340				
27				21,300			7,460	7,600				
28				20,100			7,460	8,080	10,200			
29			22,400	18,900			7,460	8,320	10,000			
30				17,500			7,660	8,160	9,760			
31							7,660	8,020				

NOTE—Discharge interpolated for April 27, 28 and 30 and for May 2 and 18.

MONTHLY DISCHARGE OF ILLINOIS RIVER NEAR LASALLE, ILLINOIS, FOR 1903

[Drainage area, 11,050 square miles]

Month	Discharge in second-feet				Runoff—depth in inches on drainage area
	Maximum	Minimum	Mean	Per square mile	
April (1–30)	42,300	16,100	25,400	2.30	2.57
May (1–23)			11,600	1.05	0.90
July (8–31)			7,790	0.705	.63
August (1–31)	8,320	7,340	7,760	0.702	0.81
September (17 days)			8,350	0.755	0.48

NOTE—Figures differ from those previously published in United States Geological Water Supply Paper No. 98, because of a better value for the drainage area and of publishing to three significant figures only

ILLINOIS RIVER AT PEORIA, ILLINOIS

Location.—At the Peoria and Pekin Union Railroad bridge at Peoria, Ill., about one mile above the mouth of Kickapoo Creek.

Records available.—March 10, 1903, to July 21, 1906. (See "Remarks.")

Drainage area.—Twelve thousand six hundred and eighty square miles.

Gage.—Vertical staff gage fastened to the central pier of the bridge. Datum has remained unchanged. Elevation of zero of gage is approximately 426.4 feet above sea level and 153.8 feet below Chicago datum.

Channel.—Bed is gravel and silt; probably permanent; broken by six bridge piers.

Floods.—From a comparison with Weather Bureau records it is estimated that the flood of the spring of 1844 reached a height of 23 feet on the United States Geological Survey gage. (See "Remarks.")

Discharge measurements.—Made from bridge.

Winter flow.—The river usually freezes over for considerable periods during December, January, February, and March, and the relation between gage height and discharge is thereby affected.

Regulation.—The natural flow has been increased by the Chicago Drainage Canal.

Remarks.—The United States Weather Bureau has maintained a gage since 1884 on the highway bridge about one and one-half mile above the United States Geological Survey gage, and daily gage readings have been taken which are published in the Weather Bureau reports. A relationship between the United States Geological Survey and Weather Bureau gages could probably be established by comparison of the gage heights for the period when both gages were in operation, and the Weather Bureau gage heights changed so that the United States Geological Survey discharge table could be applied to them to obtain the discharge for the period covered by the Weather Bureau gage heights. The estimates would be liable to error, due to changed conditions of flow at the sections before and after the period during which the United States Geological Survey gage was maintained.

DISCHARGE MEASUREMENTS OF ILLINOIS RIVER AT PEORIA, ILLINOIS, IN 1903-06

Date	Hydrographer	Width	Area of section	Mean velocity	Gage height	Discharge
1903		*Feet*	*Sq. ft.*	*Ft. per sec.*	*Feet*	*Second-ft.*
March 18	E. H. Heilbron				17.58	41,219
April 3	E. H. Heilbron				15.23	25,839
April 29	E. H. Heilbron				15.50	26,079
May 13	E. H. Heilbron				12.67	15,357
July 5	E. H. Heilbron				9.33	9,424
August 22	E. Johnson, Jr				8.40	8,713
September 25	Johnson and Hanna				11.92	15,154
October 23	F. W. Hanna				10.83	13,686
November 12	F. W. Hanna				9.00	9,135
1904						
*January 30	E. H. Heilbron	943	14,870	1.58	16.30	21,120
*February 4	E. H. Heilbron	933	13,640	1.20	15.42	16,300
February 14	E. H. Heilbron	955	14,810	1.50	16.30	21,780
March 3	E. H. Heilbron	953	13,300	1.75	14.94	23,280
March 28	E. H. Heilbron	951	19,980	2.93	21.83	58,370
March 31	E. H. Heilbron	953	20,250	2.21	21.48	†44,810
April 2	E. H. Heilbron	953	19,310	2.17	21.17	†41,930
April 7	E. H. Heilbron	953	19,030	2.71	20.12	51,560
April 9	E. H. Heilbron	953	18,570	2.87	19.66	52,370
April 16	E. H. Heilbron	953	16,870	2.46	18.00	41,460
April 24	E. H. Heilbron	946	14,080	1.96	15.70	27,690
May 1	E. H. Heilbron	952	14,460	2.16	16.00	31,310
May 18	E. H. Heilbron	950	11,830	1.43	13.21	16,910
1905						
April 5	M. S. Brennan	950	12,190	1.60	13.70	19,450
May 11	S. K. Clapp	953	11,570	1.85	13.00	21,450
June 28	M. S. Brennan	941	10,690	1.44	12.25	15,410
July 31	M. S. Brennan	893	7,143	1.15	8.50	8,242
September 31	M. S. Brennan	909	7,896	1.16	9.28	9,137
October 30	M. S. Brennan	890	7,059	1.11	8.26	7,835
1906						
‡January 15	M. S. Brennan	910	8,030	.....	9.35	9,250
March 10	M. S. Brennan	953	13,900	.....	15.60	27,100
April 6	M. S. Brennan	949	13,300	.....	14.94	24,200
May 22	A. H. Horton	914	8,530	.....	9.85	10,300

* Partly frozen.
† Questionable.
‡ Notice conditions.

DAILY GAGE HEIGHT, IN FEET, OF ILLINOIS RIVER AT PEORIA, ILLINOIS. 1903–06

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903												
1	.....	.....	.....	15.50	15.00	11.17	9.00	.....	9.00	11.25	10.08	8.58
2	.....	.....	.....	15.08	14.75	11.50	9.08	.....	8.92	11.21	10.08	8.58
3	.....	.....	.....	15.17	15.08	11.75	9.00	.....	8.83	11.00	10.00	8.58
4	.....	.....	.....	14.92	14.75	10.25	8.92	.....	8.83	11.04	9.92	8.58
5	.....	.....	.....	14.42	14.67	10.33	8.75	.....	8.83	11.08	9.92	8.50
6	.....	.....	.....	14.50	14.33	10.58	8.67	.....	8.75	10.92	9.88	8.50
7	.....	.....	.....	14.58	14.17	10.33	8.58	.....	8.67	10.92	9.71	8.42
8	.....	.....	.....	14.67	14.00	10.17	8.67	.....	8.58	11.12	9.50	8.42
9	.....	.....	.....	14.58	13.83	9.83	.....	.....	8.50	11.25	9.33	8.46
10	.....	.....	18.16	14.58	13.50	9.67	.....	.....	9.00	11.37	9.33	8.50
11	.....	.....	18.33	14.50	13.58	9.58	.....	.....	9.08	11.42	9.25	8.58
12	.....	.....	18.50	14.92	13.33	9.58	.....	.....	9.17	11.42	9.17	8.67
13	.....	.....	18.42	15.17	12.92	9.33	.....	.....	9.42	11.42	9.33	8.92
14	.....	.....	18.42	16.58	12.75	9.25	.....	.....	9.58	11.37	9.33	8.83
15	.....	.....	18.25	16.25	12.67	9.17	.....	.....	10.17	11.29	9.33	8.75
16	.....	.....	18.08	17.25	12.42	9.08	.....	.....	10.42	11.21	9.33	8.67
17	.....	.....	17.83	17.67	12.25	8.08	.....	.....	10.33	11.21	9.17	8.75
18	.....	.....	17.50	17.92	12.17	8.25	.....	.....	11.67	11.12	9.08	8.75
19	.....	.....	17.33	18.00	11.83	8.25	.....	.....	11.92	11.00	9.00	8.88
20	.....	.....	17.58	17.92	11.50	8.25	.....	.....	12.17	11.00	8.88	8.96
21	.....	.....	17.42	17.83	11.33	8.67	.....	.....	12.25	10.87	8.79	9.04
22	.....	.....	17.58	17.50	11.25	8.67	.....	8.33	12.25	10.83	8.75	9.25
23	.....	.....	17.58	17.33	11.08	8.67	.....	8.25	12.25	10.83	8.79	9.37
24	.....	.....	17.42	17.00	11.00	8.50	.....	8.25	12.17	10.62	8.83	9.46
25	.....	.....	17.33	16.67	10.92	8.33	.....	8.17	11.92	10.58	8.92	9.46
26	.....	.....	17.17	16.33	10.83	8.50	.....	8.17	11.67	10.58	8.00	9.83
27	.....	.....	16.92	16.00	10.83	8.42	.....	8.33	11.80	10.42	8.17	9.96
28	.....	.....	16.58	15.75	10.75	8.50	.....	8.67	11.62	10.33	8.25	10.00
29	.....	.....	16.33	15.42	10.58	8.92	.....	8.92	11.46	10.25	8.75	10.08
30	.....	.....	16.00	15.33	10.75	9.00	.....	9.00	11.37	10.21	8.67	10.08
31	.....	.....	15.67	.....	10.00	.....	.....	9.00	.....	10.17	.....	10.08
1904												
1	10.12	15.86	14.17	21.29	15.96	11.67	8.42	8.46	8.04	9.58	7.83	7.58
2	10.25	15.71	14.37	21.17	15.75	11.54	8.04	8.42	7.96	9.67	7.83	7.58
3	10.25	15.54	14.79	21.08	15.54	11.46	7.88	8.33	8.00	9.63	7.83	7.50
4	10.25	15.37	15.54	20.87	15.42	11.62	7.71	8.25	7.96	9.50	7.75	7.50
5	10.25	15.21	16.12	20.62	15.12	11.38	.....	8.21	7.83	9.58	7.79	7.50
6	10.17	15.33	16.67	20.46	14.87	11.29	8.04	8.12	7.78	9.46	7.75	7.50
7	10.17	15.50	16.87	20.12	14.75	11.17	7.95	8.00	7.75	9.29	7.67	7.54
8	10.17	15.62	17.04	19.79	14.54	11.17	7.92	7.92	7.63	9.17	7.75	7.66
9	10.17	15.92	17.25	19.67	14.37	11.38	8.12	7.75	7.46	9.17	7.75	7.79
10	10.17	16.29	17.67	19.46	14.29	11.46	8.12	7.83	7.38	9.08	7.75	7.83
11	10.17	16.42	17.87	19.21	14.04	11.25	8.16	7.75	7.58	9.08	7.75	7.67
12	10.21	16.42	17.92	19.08	13.87	11.04	8.42	7.71	7.42	9.04	7.71	7.67
13	10.25	16.42	17.92	18.79	13.83	10.87	8.42	7.54	7.33	9.00	7.83	7.67
14	10.25	16.29	17.79	18.50	13.79	10.71	8.58	7.67	7.33	8.88	7.71	7.67
15	10.25	16.04	17.54	18.17	13.29	10.54	8.71	7.54	7.33	8.75	7.67	7.67
16	10.17	15.79	17.29	17.96	13.46	10.38	8.67	7.50	7.29	8.66	7.75	7.67
17	10.17	15.54	17.13	17.50	13.37	10.16	8.67	7.50	7.25	8.58	7.75	7.67
18	10.08	15.33	16.87	17.21	13.21	9.88	8.67	7.42	7.33	8.50	7.83	7.75
19	10.08	15.13	16.87	16.96	13.17	9.75	8.62	7.42	7.54	8.42	7.79	7.83
20	10.46	14.85	17.25	16.58	12.88	9.46	8.54	7.84	7.75	8.33	7.88	7.83
21	12.21	14.70	17.83	16.25	12.71	9.41	8.42	7.58	7.79	8.37	7.83	7.92
22	13.04	14.54	18.83	15.87	12.42	9.29	8.29	8.12	7.75	8.42	7.83	7.92
23	13.54	14.36	19.46	15.58	12.50	9.08	8.12	8.21	7.62	8.33	7.79	7.92
24	14.46	14.20	20.04	15.58	12.38	8.83	8.04	8.29	7.66	8.25	7.83	8.08
25	15.33	14.00	20.62	15.75	12.13	8.83	7.88	8.42	7.83	8.20	7.83	8.09
26	15.91	13.80	21.12	15.92	12.08	8.71	7.79	8.42	8.94	8.20	7.83	8.21
27	16.08	13.60	21.67	15.87	11.96	8.54	7.75	8.42	9.63	8.08	7.83	8.29
28	16.29	13.58	21.83	15.87	11.79	8.38	7.75	8.33	9.44	8.00	7.58	8.71
29	16.33	14.00	21.75	15.54	11.67	8.21	7.62	8.25	9.33	8.00	7.58	8.75
30	16.25	.....	21.62	16.00	11.75	8.13	7.54	8.25	9.54	8.00	7.58	8.83
31	16.04	.....	21.46	.....	11.67	.....	8.84	8.12	.....	7.92	.....	8.75
1905												
1	8.75	9.33	12.5	14.0	13.9	14.7	11.6	8.46	8.08	8.42	8.17	7.92
2	8.75	9.33	13.0	14.0	13.9	14.6	11.55	8.46	8.17	8.33	8.17	7.92
3	8.75	9.33	13.5	14.0	13.8	14.4	11.35	8.38	8.25	8.25	8.08	8.08
4	8.79	9.33	14.2	13.8	13.7	14.2	11.0	8.42	8.79	8.38	8.08	8.08
5	8.88	9.33	14.5	13.8	13.6	13.9	10.95	8.42	9.12	8.33	8.0	8.08
6	8.92	9.33	14.8	13.7	13.6	14.4	10.4	8.42	9.38	8.12	8.0	8.08
7	8.92	9.33	14.9	13.6	13.4	14.0	10.85	8.42	9.6	7.96	8.08	8.08
8	9.08	9.33	15.0	13.5	13.2	13.9	10.75	8.29	9.8	7.88	8.08	8.2
9	9.08	9.42	15.0	13.3	13.1	13.6	10.75	8.25	9.85	7.8	8.17	8.33
10	9.0	9.5	14.9	13.1	13.0	14.0	10.65	8.17	9.85	7.92	8.17	8.33
11	9.17	9.5	14.7	13.2	12.8	14.0	10.6	8.04	9.85	7.84	8.05	8.33
12	9.17	.....	14.5	13.1	13.0	14.0	10.45	8.0	9.8	7.75	8.0	8.33
13	9.17	.....	14.3	12.9	13.2	14.0	10.4	8.0	9.85	7.62	8.12	8.33
14	9.17	.....	14.0	13.8	14.0	14.1	10.35	8.17	9.6	7.58	8.05	8.33

DAILY GAGE HEIGHT, IN FEET, OF ILLINOIS RIVER AT PEORIA, ILLINOIS—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1905												
15	9.17	.....	13.9	13.7	15.1	14.1	10.2	8.29	9.6	7.42	8.0	8.3
16	9.17	.....	13.6	13.5	16.2	14.0	10.1	8.33	9.55	7.55	8.0	8.25
17	9.17	.....	13.4	13.3	16.8	13.8	9.9	8.25	9.6	7.67	8.42	8.17
18	9.17	9.5	13.3	13.1	17.2	13.6	9.9	8.17	9.42	7.96	8.42	8.08
19	9.17	9.42	13.3	13.1	17.4	13.7	9.75	8.33	9.21	8.0	7.95	8.08
20	9.21	9.42	13.4	12.8	17.4	13.6	9.65	8.33	9.25	7.96	7.8	8.17
21	9.29	9.6	13.5	13.0	17.0	13.5	9.5	8.42	9.25	7.92	7.67	8.33
22	9.33	9.7	13.5	13.2	16.3	13.4	9.29	8.42	9.25	7.8	7.67	8.33
23	9.33	9.75	13.5	13.3	16.5	13.2	9.21	8.42	9.29	7.92	7.45	8.33
24	9.33	9.9	13.6	13.7	16.2	13.0	9.04	8.42	9.21	8.17	7.3	8.33
25	9.42	10.35	13.5	13.0	15.9	12.8	8.92	8.17	9.04	8.25	7.33	8.33
26	9.38	10.95	13.7	13.3	15.7	12.7	8.83	8.29	8.83	8.17	7.3	8.2
27	9.25	11.45	13.8	13.5	15.5	12.5	8.71	8.17	8.75	8.2	7.5	8.17
28	9.25	11.9	13.8	13.7	16.2	12.3	8.62	8.17	8.67	8.3	7.67	8.38
29	9.25	.....	14.0	13.7	15.1	12.1	8.58	8.08	8.58	8.25	7.55	8.55
30	9.25	.....	14.0	13.8	15.0	11.9	8.42	8.12	8.5	8.2	7.8	8.67
31	9.33	.....	14.0	.....	14.9	.....	8.5	8.17	.....	8.17	.....	8.75
1906												
1	8.75	14.00	15.17	15.33	12.62	9.33	7.83	.....	.....	.....	.....	.....
2	8.75	14.08	15.25	15.33	12.46	9.29	7.75	.....	.....	.....	.....	.....
3	8.75	14.00	15.25	15.29	12.29	9.21	7.75	.....	.....	.....	.....	.....
4	8.83	13.83	15.38	15.17	12.25	8.88	7.67	.....	.....	.....	.....	.....
5	8.96	13.67	15.50	15.08	12.17	8.83	7.54	.....	.....	.....	.....	.....
6	9.12	13.42	15.58	14.96	12.04	8.79	7.38	.....	.....	.....	.....	.....
7	9.42	13.33	15.67	14.75	11.79	8.67	7.25	.....	.....	.....	.....	.....
8	9.33	13.25	15.67	14.75	11.75	8.79	7.33	.....	.....	.....	.....	.....
9	9.38	13.17	15.67	14.79	11.50	8.79	7.12	.....	.....	.....	.....	.....
10	9.50	13.04	15.67	14.83	11.38	8.88	7.00	.....	.....	.....	.....	.....
11	9.50	12.83	15.67	14.96	11.12	8.92	6.96	.....	.....	.....	.....	.....
12	9.50	12.75	15.58	15.08	10.96	8.83	6.92	.....	.....	.....	.....	.....
13	9.50	12.67	15.50	15.08	10.92	8.83	6.92	.....	.....	.....	.....	.....
14	9.50	12.67	15.42	15.17	10.83	8.83	6.83	.....	.....	.....	.....	.....
15	9.58	12.67	15.17	15.25	10.67	8.75	6.83	.....	.....	.....	.....	.....
16	9.79	12.67	14.83	15.29	10.46	8.75	6.83	.....	.....	.....	.....	.....
17	9.83	12.67	14.62	15.12	10.71	8.75	6.75	.....	.....	.....	.....	.....
18	9.83	12.58	14.46	14.96	10.50	8.67	6.67	.....	.....	.....	.....	.....
19	9.75	12.50	14.29	14.83	10.42	8.58	6.67	.....	.....	.....	.....	.....
20	9.67	12.50	14.08	14.71	10.21	8.58	6.67	.....	.....	.....	.....	.....
21	10.04	12.96	13.88	14.58	10.00	8.50	6.75	.....	.....	.....	.....	.....
22	10.42	13.17	13.75	14.46	9.88	8.50	.....	.....	.....	.....	.....	.....
23	10.50	13.50	13.67	14.17	9.75	8.50	.....	.....	.....	.....	.....	.....
24	11.17	13.92	13.54	13.83	9.71	8.50	.....	.....	.....	.....	.....	.....
25	11.79	14.25	13.46	13.67	9.54	8.38	.....	.....	.....	.....	.....	.....
26	12.38	14.71	13.42	13.62	9.58	8.33	.....	.....	.....	.....	.....	.....
27	12.83	15.12	13.79	13.38	9.62	8.21	.....	.....	.....	.....	.....	.....
28	13.21	15.17	14.25	13.17	9.67	7.96	.....	.....	.....	.....	.....	.....
29	13.38	.....	14.71	13.00	9.54	7.83	.....	.....	.....	.....	.....	.....
30	13.62	.....	15.17	12.88	9.38	7.92	.....	.....	.....	.....	.....	.....
31	13.79	.....	15.33	.....	9.29	.....	.....	.....	.....	.....	.....	.....

NOTE—River frozen over January 1–March 20, 1904; ice December 13–31, 1904. Ice January 1–March 31, 1905, 0.5 to 1.00 foot thick. Running ice during greater part of January, February and March, 1906. Gage not read July 9–Aug. 21, 1904.

RATING TABLE FOR ILLINOIS RIVER AT PEORIA, ILLINOIS, FROM MARCH 10, 1903–JULY 21, 1906

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
6.60	6,100	7.80	7,330	9.00	8,790	10.20	10,760
6.70	6,200	7.90	7,440	9.10	8,930	10.30	10,950
6.80	6,300	8.00	7,550	9.20	9,080	10.40	11,140
6.90	6,400	8.10	7,660	9.30	9,230	10.50	11,340
7.00	6,500	8.20	7,780	9.40	9,390	10.60	11,540
7.10	6,600	8.30	7,900	9.50	9,550	10.70	11,750
7.20	6,700	8.40	8,020	9.60	9,710	10.80	11,960
7.30	6,800	8.50	8,140	9.70	9,870	10.90	12,170
7.40	6,900	8.60	8,260	9.80	10,040	11.00	12,390
7.50	7,000	8.70	8,390	9.90	10,210	11.10	12,610
7.60	7,110	8.80	8,520	10.00	10,390	11.20	12,830
7.70	7,220	8.90	8,650	10.10	10,570	11.30	13,050

RATING TABLE FOR ILLINOIS RIVER AT PEORIA, ILLINOIS—*Concluded*

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
11.40	13,280	13.00	17,400	14.60	22,550	16.20	29,580
11.50	13,510	13.10	17,690	14.70	22,920	16.30	30,040
11.60	13,740	13.20	17,790	14.80	23,300	16.40	30,530
11.70	13,980	13.30	18,290	14.90	23,690	16.50	31,020
11.80	14,220	13.40	18,590	15.00	24,090	16.60	31,510
11.90	14,460	13.50	18,900	15.10	24,500	16.70	32,000
12.00	14,700	13.60	19,210	15.20	24,920	16.80	32,500
12.10	14,950	13.70	19,520	15.30	25,350	16.90	33,000
12.20	15,210	13.80	19,840	15.40	25,790	17.00	33,500
12.30	15,470	13.90	20,160	15.50	26,240	18.00	38,500
12.40	15,730	14.00	20,480	15.60	26,700	19.00	43,500
12.50	15,990	14.10	20,810	15.70	27,160	20.00	48,500
12.60	16,270	14.20	21,150	15.80	27,630	21.00	53,500
12.70	16,540	14.30	21,490	15.90	28,110	22.00	58,500
12.80	16,820	14.40	21,840	16.00	28,600		
12.90	17,110	14.50	22,190	16.10	29,080		

NOTE—The above table is not applicable for ice or obstructed channel conditions. It is based on discharge measurements made during 1903–06, and is well defined between gage heights 8.3 feet and 16.0 feet. Above gage height 16.7 feet the rating curve is a tangent, the difference being 500 per tenth. Below 8.0 feet the curve is approximate.

DAILY DISCHARGE IN SECOND-FEET, OF ILLINOIS RIVER AT PEORIA, ILLINOIS, FOR 1903–06

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903												
1				26,200	24,100	12,800	8,790		8,790	12,900	10,500	8,240
2				24,400	23,100	13,500	8,900		8,680	12,800	10,500	8,240
3				21,800	24,400	14,100	8,790		8,560	12,400	10,400	8,240
4				23,800	23,100	10,900	8,680		8,560	12,500	10,200	8,240
5				21,900	22,800	11,000	8,460		8,560	12,600	10,200	8,140
6				22,200	21,600	11,500	8,350		8,460	12,200	10,100	8,140
7				22,500	21,000	11,000	8,240		8,350	12,200	9,890	8,040
8				22,800	20,500	10,700	8,350		8,240	12,700	9,550	8,040
9				22,500	19,900	10,100			8,140	12,900	9,280	8,090
10			39,300	22,500	18,900	9,820			8,790	13,200	9,280	8,140
11			40,200	22,200	19,100	9,620			8,900	13,300	9,160	8,240
12			41,000	23,800	18,400	9,680			9,040	13,300	9,040	8,360
13			40,600	24,800	17,100	9,280			9,420	13,300	9,280	8,680
14			40,600	31,400	16,700	9,160			9,680	13,200	9,280	8,560
15			39,800	29,800	16,500	9,040			10,700	13,000	9,280	8,460
16			38,900	34,800	15,800	8,900			11,200	12,900	9,280	8,360
17			37,660	36,900	15,300	7,640			11,000	12,900	9,040	8,460
18			36,000	38,100	15,100	7,840			13,900	12,700	8,900	8,460
19			35,200	38,500	14,300	7,840			14,500	12,400	8,790	8,620
20			36,400	38,100	13,500	7,840			15,100	12,400	8,620	8,730
21			35,600	37,600	13,100	8,350			15,300	12,100	8,510	8,850
22			36,400	36,000	12,900	8,350		7,940	15,300	12,000	8,460	9,160
23			36,400	35,200	12,500	8,350		7,840	15,300	12,000	8,510	9,340
24			35,600	33,500	12,400	8,140		7,840	15,100	11,600	8,560	9,480
25			35,200	31,800	12,200	7,940		7,740	14,500	11,500	8,680	9,480
26			34,400	30,100	12,000	8,140		7,740	13,900	11,500	7,550	10,100
27			33,100	28,600	12,000	7,940		7,940	14,200	11,200	7,740	10,300
28			31,400	27,400	11,900	8,140		8,350	13,800	11,000	7,840	10,400
29			30,200	25,900	11,500	8,680		8,680	13,400	10,900	8,460	10,500
30			28,600	25,500	11,900	8,790		8,790	13,200	10,800	8,350	10,500
31			27,000		10,400			8,790		10,700		10,500
1904												
1				55,000	28,400	13,900	8,040	8,090	7,590	9,680	7,360	7,090
2				54,400	27,400	13,600	7,590	8,040	7,510	9,820	7,360	7,090
3				53,900	26,400	13,400	7,420	7,940	7,550	9,760	7,360	7,000
4				52,800	25,900	13,800	7,230	7,840	7,510	9,550	7,280	7,000
5				51,600	24,600	13,200	7,410	7,790	7,360	9,680	7,320	7,000
6				50,800	23,600	13,000	7,590	7,680	7,310	9,490	7,280	7,000
7				49,100	23,100	12,800	7,500	7,550	7,280	9,220	7,190	7,040
8				47,400	22,300	12,800	7,460	7,460	7,140	9,040	7,280	7,180
9				46,800	21,700	13,200	7,680	7,280	6,960	9,040	7,280	7,320
10				45,800	21,400	13,400	7,680	7,360	6,880	8,900	7,280	7,360
11				44,600	20,600	12,900	7,730	7,280	7,090	8,900	7,280	7,190
12				43,900	20,000	12,500	8,040	7,230	6,920	8,850	7,230	7,190
13				42,400	19,500	12,100	8,040	7,040	6,830	8,790	7,360	

DAILY DISCHARGE, IN SECOND-FEET, OF ILLINOIS RIVER AT PEORIA, ILLINOIS—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1904												
14	.....	.....	.....	41,000	19,800	11,800	8,240	7,190	6,830	8,620	7,230	.....
15	.....	.....	.....	39,400	18,300	11,400	8,400	7,040	6,830	8,460	7,190	.....
16	.....	.....	.....	38,300	18,800	11,100	8,350	7,000	6,790	8,340	7,280	.....
17	.....	.....	.....	36,000	18,500	10,700	8,350	7,000	6,750	8,240	7,280	.....
18	.....	.....	.....	34,600	18,000	10,200	8,350	6,920	6,830	8,140	7,360	.....
19	.....	.....	.....	33,300	17,900	9,960	8,290	6,920	7,040	8,040	7,320	.....
20	.....	.....	34,800	31,400	17,100	9,490	8,190	7,370	7,280	7,940	7,420	.....
21	.....	.....	37,600	29,800	16,600	9,410	8,040	7,090	7,320	7,980	7,360	.....
22	.....	.....	42,600	28,000	15,800	9,220	7,890	7,680	7,280	8,040	7,360	.....
23	.....	.....	45,800	26,600	16,000	8,900	7,680	7,790	7,130	7,940	7,320	.....
24	.....	.....	48,700	26,600	15,700	8,560	7,590	7,890	7,180	7,840	7,360	.....
25	.....	.....	51,600	27,400	15,000	8,560	7,420	8,040	7,360	7,780	7,360	.....
26	.....	.....	54,100	28,200	14,900	8,400	7,320	8,040	8,710	7,780	7,360	.....
27	.....	.....	56,800	28,000	14,600	8,190	7,280	8,040	9,760	7,640	7,360	.....
28	.....	.....	57,600	28,000	14,200	8,000	7,280	7,940	9,450	7,550	7,090	.....
29	.....	.....	57,200	26,400	13,900	7,790	7,130	7,840	9,280	7,550	7,090	.....
30	.....	.....	56,600	28,600	14,100	7,700	7,040	7,840	9,610	7,550	7,090	.....
31	.....	.....	55,800	.....	13,900	.....	8,570	7,680	.....	7,460	.....	.....
1905												
1	.....	.....	.....	20,500	20,200	22,900	13,700	8,090	7,640	8,040	7,740	7,460
2	.....	.....	.....	20,500	20,200	22,600	13,600	8,090	7,740	7,940	7,740	7,460
3	.....	.....	.....	20,500	19,800	21,800	13,200	8,000	7,840	7,840	7,640	7,640
4	.....	.....	.....	19,800	19,500	21,200	12,400	8,040	8,510	8,000	7,640	7,640
5	.....	.....	.....	19,800	19,200	20,200	12,300	8,040	8,960	7,940	7,550	7,640
6	.....	.....	.....	19,500	19,200	21,800	11,100	8,040	9,360	7,680	7,550	7,640
7	.....	.....	.....	19,200	18,600	20,500	12,100	8,040	9,710	7,510	7,640	7,640
8	.....	.....	.....	18,900	18,000	20,200	11,900	7,890	10,000	7,420	7,640	7,780
9	.....	.....	.....	18,300	17,700	19,200	11,900	7,840	10,100	7,330	7,740	7,940
10	.....	.....	.....	17,700	17,400	20,500	11,600	7,740	10,100	7,460	7,740	7,940
11	.....	.....	.....	18,000	16,800	20,500	11,500	7,590	10,100	7,370	7,600	7,940
12	.....	.....	.....	17,700	17,400	20,500	11,200	7,550	10,000	7,280	7,550	7,940
13	.....	.....	.....	17,100	18,000	20,500	11,100	7,550	10,100	7,130	7,680	7,940
14	.....	.....	.....	19,800	20,500	20,800	11,000	7,740	9,710	7,090	7,600	7,940
15	.....	.....	.....	19,500	24,500	20,800	10,800	7,890	9,710	6,920	7,550	7,900
16	.....	.....	.....	18,900	29,600	20,500	10,600	7,940	9,630	7,060	7,550	7,840
17	.....	.....	.....	18,300	32,500	19,800	10,200	7,840	9,710	7,190	8,040	7,740
18	.....	.....	.....	17,700	34,500	19,200	10,200	7,740	9,420	7,510	8,040	7,640
19	.....	.....	.....	17,700	35,500	19,500	9,960	7,940	9,100	7,550	7,500	7,640
20	.....	.....	.....	16,800	35,500	19,200	9,790	7,940	9,160	7,510	7,330	7,740
21	.....	.....	.....	17,400	33,500	18,900	9,550	8,040	9,160	7,460	7,190	7,940
22	.....	.....	.....	18,000	30,000	18,600	9,220	8,040	9,160	7,330	7,190	7,940
23	.....	.....	.....	18,300	31,000	18,000	9,100	8,040	9,220	7,460	6,950	7,940
24	.....	.....	.....	19,500	29,600	17,400	8,840	8,040	9,100	7,740	6,800	7,940
25	.....	.....	.....	17,400	28,100	16,800	8,680	7,740	8,850	7,840	6,830	7,940
26	.....	.....	.....	18,300	27,200	16,500	8,560	7,890	8,560	7,740	6,800	7,780
27	.....	.....	.....	18,900	26,200	16,000	8,400	7,740	8,460	7,780	7,000	7,740
28	.....	.....	.....	19,500	29,600	15,500	8,290	7,740	8,350	7,900	7,190	8,000
29	.....	.....	.....	19,500	24,500	15,000	8,240	7,640	8,240	7,740	7,060	8,200
30	.....	.....	.....	19,800	24,100	14,500	8,040	7,680	8,140	7,780	7,330	8,350
31	.....	.....	.....	.....	23,700	.....	8,140	7,740	.....	7,740	.....	8,460
1906												
1	8,460	20,500	24,800	25,500	16,300	9,280	7,360	.....	.....	.....	.....	.....
2	8,460	20,700	25,200	25,500	15,900	9,220	7,280	.....	.....	.....	.....	.....
3	8,460	20,500	25,200	25,300	15,400	9,100	7,270	.....	.....	.....	.....	.....
4	8,560	19,900	25,700	24,800	15,300	8,620	7,190	.....	.....	.....	.....	.....
5	8,730	19,400	26,300	24,400	15,100	8,560	7,040	.....	.....	.....	.....	.....
6	8,960	18,700	26,600	23,900	14,800	8,510	6,880	.....	.....	.....	.....	.....
7	9,420	18,400	27,000	23,100	14,200	8,350	6,750	.....	.....	.....	.....	.....
8	9,280	18,100	27,000	23,100	14,100	8,510	6,830	.....	.....	.....	.....	.....
9	9,360	17,900	27,000	23,300	13,500	8,510	6,620	.....	.....	.....	.....	.....
10	9,550	17,500	27,000	23,400	13,200	8,620	6,500	.....	.....	.....	.....	.....
11	9,550	16,900	27,000	23,900	12,700	8,680	6,460	.....	.....	.....	.....	.....
12	9,550	16,700	26,600	24,400	12,300	8,560	6,420	.....	.....	.....	.....	.....
13	9,550	16,500	26,300	24,400	12,200	8,560	6,420	.....	.....	.....	.....	.....
14	9,550	16,500	25,900	24,800	12,000	8,560	6,330	.....	.....	.....	.....	.....
15	9,680	16,500	24,800	25,200	11,700	8,460	6,330	.....	.....	.....	.....	.....
16	10,000	16,500	23,400	25,300	11,300	8,460	6,330	.....	.....	.....	.....	.....
17	10,100	16,500	22,600	24,600	11,800	8,460	6,250	.....	.....	.....	.....	.....
18	10,100	16,200	22,100	23,900	11,300	8,350	6,170	.....	.....	.....	.....	.....
19	9,960	16,000	21,500	23,400	11,200	8,240	6,170	.....	.....	.....	.....	.....
20	9,820	16,000	20,700	23,000	10,800	8,240	6,170	.....	.....	.....	.....	.....
21	10,500	17,300	20,100	22,500	10,400	8,140	6,250	.....	.....	.....	.....	.....
22	11,200	17,900	19,700	22,100	10,200	8,140	.....	.....	.....	.....	.....	.....
23	11,300	18,900	19,400	21,000	9,960	8,140	.....	.....	.....	.....	.....	.....
24	12,800	20,200	19,000	19,900	9,890	8,140	.....	.....	.....	.....	.....	.....
25	14,200	21,300	18,800	19,400	9,610	8,000	.....	.....	.....	.....	.....	.....
26	15,700	23,000	18,700	19,300	9,680	7,940	.....	.....	.....	.....	.....	.....
27	16,900	24,600	19,800	18,500	9,740	7,790	.....	.....	.....	.....	.....	.....

DAILY DISCHARGE IN SECOND-FEET, OF ILLINOIS RIVER AT PEORIA, ILLINOIS—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1906												
28	18,000	24,800	21,300	17,900	9,820	7,510	.....	.....	.....	.....	.....	.....
29	18,500	.....	23,000	17,400	9,610	7,360	.....	.....	.....	.....	.....	.....
30	19,300	.....	24,800	17,100	9,360	7,460	.....	.....	.....	.....	.....	.....
31	19,800	.....	25,500	.....	9,220	.....	.....	.....	.....	.....	.....	.....

*NOTE—Discharge interpolated for July 5, 1904. Ice January 1–March 20, and December 13–31, 1904, and January 1–March 31, 1905. Discharges probably slightly affected by ice during January and February, 1906.

This data differs from that previously published in United States Geological Surevy Water Supply Papers Nos. 98, 128, 171 and 207, because of revising rating curve on account of later discharge measurements. The monthly estimates as here published were computed using a more accurate value of the drainage area.

MONTHLY DISCHARGE OF ILLINOIS RIVER AT PEORIA, ILLINOIS, FOR 1903–06

[Drainage area, 12,680 square miles]

Month	Discharge in second-feet				Runoff—depth in inches on drainage area
	Maximum	Minimum	Mean	Per square mile	
1903					
March (10-31)	.....	.....	35,900	2.83	2.32
April	38,500	21,900	26,800	2.27	2.53
May	24,400	10,400	16,600	1.31	1.51
June	14,100	7,640	9,510	0.750	0.84
July (1-8)	.....	.....	8,570	0.676	0.20
August (22-31)	.....	.....	8,160	0.644	0.24
September	15,300	8,140	11,400	0.899	1.00
October	13,300	10,700	12,300	0.970	1.12
November	10,500	7,550	9,110	0.718	0.80
December	10,500	8,040	8,880	0.700	0.81
1904					
March (20-31)	.....	.....	49,900	3.93	1.76
April	55,000	26,400	39,000	3.07	3.42
May	28,400	13,900	19,300	1.52	1.75
June	13,900	7,700	11,000	0.867	0.97
July	8,570	7,040	7,770	0.612	0.71
August	8,090	6,920	7,550	0.596	0.69
September	9,760	6,750	7,510	0.592	0.66
October	9,820	7,460	8,500	0.670	0.77
November	7,420	7,090	7,290	0.575	0.64
December (1-12)	.....	.....	7,120	0.561	0.25
1905					
April	20,500	16,800	18,800	1.48	1.65
May	35,500	16,800	24,600	1.94	2.24
June	22,900	14,500	19,300	1.52	1.70
July	13,700	8,040	10,500	0.828	0.95
August	8,090	7,550	7,870	0.621	0.72
September	10,100	7,640	9,130	0.720	0.80
October	8,040	6,920	7,560	0.596	0.69
November	8,040	6,800	7,450	0.588	0.66
December	8,460	7,460	7,850	0.619	0.71
1906					
January	19,800	8,460	11,500	0.907	1.05
February	24,800	16,000	18,700	1.47	1.53
March	27,000	18,700	23,600	1.86	2.14
April	25,500	17,100	22,700	1.79	2.00
May	16,300	9,220	12,000	0.946	1.09
June	9,280	7,360	8,350	0.658	0.73
July (1-21)	7,360	6,170	6,620	0.522	0.41

NOTE—No estimates are given for ice periods, except for 1906, when the effect of ice was probably slight. See note after table of daily discharges.

KANKAKEE RIVER DRAINAGE BASIN

GENERAL FEATURES

The Kankakee River rises in Laporte County, Indiana, flows southwest to the mouth of the Iroquois, in Illinois, thence northwest to join with the Desplaines to form the Illinois River in Grundy County, Illinois. The total length is about 135 miles, of which 50 miles are in Illinois. The drainage basin comprises 5,280 square miles, of which 2,140 square miles are in Illinois, and 3,140 square miles in Indiana. The most important tributaries are Yellow and Iroquois rivers.

The basin is generally level, but near the State line a ledge of limestone runs across the valley and has so prevented the wearing down of the bed that a very large part of the drainage area in Indiana is a vast swamp, with ridges rising here and there. The entire marsh portion is devoid of rocks, except a few moraines containing scattered gravel and boulders. Below Momence, Ill., the basin is entirely different. The country is flat and there are no swamps. The river has not cut deep below the surface and the bed is largely of rock. The banks are generally high enough to prevent extensive overflow.

There are no forested areas in Illinois, but the ridges in Indiana have a growth of scrub oak. The mean annual rainfall is about 34 inches and the average temperature is about 50°. The winters are comparatively severe, ice forming on the rivers from one-half to one foot thick during portions of the winter. The snowfall averages about 30 inches.

There are but few, if any, suitable sites for storage reservoirs, and the cost of land that would be submerged prohibits their construction. The fall of the river about Momence is about one-half foot per mile, and this makes it of no value for water power. Below Momence, however, the descent is about two and one-half feet per mile, and owing to the rock bed and suitable banks many dam sites are available. A number of water powers have been developed. The swamps act as a regulator by tending to keep up the low water flow. The swamps in Indiana are being drained and the channel of the Kankakee is being straightened so that the swamp area will be much reduced in a few years. It will be of interest to note the effect on the flow of the stream as the swamp areas are reclaimed.

KANKAKEE RIVER AT MOMENCE, ILLINOIS

Location.—At the highway bridge in Momence, Ill., about one-half mile below the Chicago and Eastern Illinois Railroad bridge.

Records available.—February 24 to December 16, 1905; February 21 to July 20, 1906.

Drainage area.—Two thousand three hundred and forty square miles.

Gage.—Standard chain gage attached to downstream side of second span from left bank. Datum remained unchanged during period of operation. Elevation of zero of gage is 5.38 feet above Momence city datum, which is 607.06 feet above sea level.

Channel.—Solid limestone rock; permanent; river is divided by an island which begins one mile above and terminates about 500

feet below. There are two channels at all stages, most of the water flowing in the left channel.

Discharge measurements.—Made from bridge.

Winter flow.—No record of ice periods was taken.

Accuracy.—The right channel is wide, with a rough bed, which may affect the accuracy of measurements at stages above the ordinary.

DISCHARGE MEASUREMENTS OF KANKAKEE RIVER AT MONENCE, ILLINOIS IN 1905–06

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1905		*Feet*	*Sq.-ft.*	*Feet*	*Sec.-ft.*
February	22F. W. Hanna	481	261	2.90	*365
March	13S. K. Clapp	482	941	2.78	2,737
May	11M. S Brennan	492	1,192	3.25	3,974
May	15F. W. Hanna	406	1,513	3.05	4,370
June	25M. S. Brennan	485	845	2.65	2,072
July	29M. S. Brennan	463	577	2.18	1,140
August	26M. S. Brennan	442	450	1.966	685
September	12M. S. Brennan	459	598	2.19	1,179
October	6M. S. Brennan	431	414	1.78	598
1906					
March	9M. S. Brennan	501	1,190	3.27	3,920
April	24E. F. Kriegsman	473	851	2.75	2,350
April	27E. F. Kriegsman	466	822	2.68	2,230
June	13E. F. Kriegsman	440	592	2.12	1,200

* Ice measurement.

DAILY GAGE HEIGHT, IN FEET, OF KANKAKEE RIVER AT MOMENCE, ILLINOIS, 1905–06

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1905												
1	.....	.....	3.8	3.15	2.9	3.5	2.55	2.05	1.8	1.92	1.8	2.05
2	.....	.....	3.9	3.15	2.9	3.35	2.5	2.05	2.7	1.9	1.8	2.05
3	.....	.....	3.8	3.1	2.9	3.2	2.5	2.0	3.05	1.9	1.8	2.15
4	.....	.....	3.6	3.1	3.0	3.25	2.45	2.0	2.85	1.85	1.8	2.1
5	.....	.....	3.8	3.05	3.0	3.35	2.4	2.0	2.6	1.82	1.82	2.25
6	.....	.....	3.9	3.05	3.0	3.05	2.4	2.0	2.42	1.8	1.92	2.05
7	.....	.....	4.5	3.0	2.95	2.9	2.32	1.98	2.32	1.75	1.95	2.0
8	.....	.....	2.6	2.9	2.9	2.8	2.3	1.95	2.22	1.75	1.95	2.1
9	.....	.....	2.7	2.9	2.9	2.7	2.38	1.95	2.2	1.7	1.95	2.3
10	.....	.....	2.7	2.85	2.85	2.8	2.42	1.9	2.2	1.75	1.95	2.3
11	.....	.....	2.8	2.85	3.4	3.3	2.5	1.9	2.2	1.75	1.95	2.0
12	.....	.....	2.8	2.8	4.5	3.25	2.48	1.82	2.2	1.72	1.95	2.3
13	.....	.....	2.8	2.75	4.4	3.1	2.4	1.9	2.2	1.7	.....	2.35
14	.....	.....	2.8	2.7	4.2	3.0	2.32	2.0	2.2	1.7	1.95	2.1
15	.....	.....	2.8	2.7	.....	2.8	2.25	2.08	2.2	1.7	1.95	1.95
16	.....	.....	2.8	2.6	3.85	2.7	2.2	2.05	2.2	1.7	1.95	2.05
17	.....	.....	2.9	2.55	3.95	2.6	2.13	2.0	2.25	1.7	1.98	.....
18	.....	.....	3.0	2.5	3.95	3.0	2.12	1.95	2.25	1.72	2.0	.....
19	.....	.....	3.05	2.5	3.85	3.0	2.15	1.95	2.22	1.78	2.0	.....
20	.....	.....	3.05	2.65	3.8	2.8	2.18	2.0	2.2	1.8	2.0	.....
21	.....	.....	3.0	3.15	3.7	2.75	2.2	1.95	2.2	1.75	2.0	.....
22	.....	.....	2.9	3.2	3.6	2.75	2.2	1.95	2.15	1.78	1.95	.....
23	.....	.....	2.9	3.1	3.55	2.7	2.2	1.9	2.1	1.8	1.95	.....
24	.....	2.95	3.15	3.0	3.5	2.7	2.2	1.9	2.1	1.8	1.95	.....
25	.....	2.1	3.2	2.9	3.45	2.65	2.2	1.9	2.02	1.8	1.95	.....
26	.....	3.7	3.2	2.9	3.7	2.65	2.2	1.88	2.0	1.8	1.95	.....
27	.....	3.8	3.1	3.0	3.75	2.7	2.2	1.8	2.0	1.8	1.95	.....
28	.....	3.6	3.05	3.0	3.6	2.7	2.2	1.8	1.95	1.8	2.0	.....
29	.....	.....	3.1	3.0	3.5	2.6	2.2	1.75	1.95	1.8	2.05	.....
30	.....	.....	3.1	3.0	3.6	2.6	2.2	1.75	1.9	1.8	2.05	.....
31	.....	.....	3.1	.....	3.55	.....	2.12	1.78	.....	1.8	.....	.....
1906												
1	.....	.....	2.70	2.95	2.52	2.00	1.80	.....	.....	.....	.....	.....
2	.....	.....	2.70	2.90	2.50	2.00	1.80	.....	.....	.....	.....	.....
3	.....	.....	3.30	2.90	2.45	2.00	1.80	.....	.....	.....	.....	.....
4	.....	.....	3.42	2.90	2.42	2.00	1.80	.....	.....	.....	.....	.....
5	.....	.....	3.35	2.90	2.38	2.00	1.80	.....	.....	.....	.....	.....
6	.....	.....	3.25	3.00	2.35	1.95	1.78	.....	.....	.....	.....	.....
7	.....	.....	3.20	3.02	2.30	1.98	1.73	.....	.....	.....	.....	.....

DAILY GAGE HEIGHT, IN FEET, OF KANKAKEE RIVER AT MOMENCE, ILLINOIS—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1906												
8			3.30	3.05	2.25	2.08	1.70					
9			3.30	3.42	2.25	2.20	1.70					
10			3.30	3.50	2.20	2.20	1.70					
11			3.20	3.38	2.20	2.20	1.70					
12			3.12	3.22	2.20	2.18	1.70					
13			3.05	3.10	2.20	2.10	1.65					
14			3.02	3.08	2.18	2.08	1.65					
15			3.02	3.02	2.12	2.05	1.65					
16			3.02	3.00	2.10	2.05	1,68					
17			3.05	2.95	2.10	2.00	1.65					
18			3.02	2.90	2.10	2.00	1.65					
19			2.95	2.90	2.10	2.05	1.65					
20			2.92	2.82	2.05	2.10	1.65					
21		2.68	2.85	2.80	2.02	2.08						
22		2.90	2.82	2.80	2.00	2.08						
23		2.75	2.78	2.75	2.00	2.05						
24		2.85	2.75	2.75	1.98	2.00						
25		3.10	2.78	2.70	1.95	1.95						
26		3.02	2.92	2.70	1.95	1.90						
27		2.88	3.20	2.65	1.95	1.90						
28		2.78	3.25	2.65	2.00	1.90						
29			3.12	2.60	2.00	1.88						
30			3.00	2.58	2.00	1.85						
31			3.00		2.00							

NOTE—No ice record for this station.

RATING TABLE FOR KANKAKEE RIVER AT MOMENCE, ILLINOIS, FROM FEBRUARY 24, 1905–JULY 20, 1906

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.60	310	2.40	1,590	3.20	3,460	4.00	5,570
1.70	410	2.50	1.810	3.30	3,710	4.10	5,840
1.80	520	2.60	2,030	3.40	3,970	4.20	6,120
1.90	650	2.70	2,260	3.50	4,230	4.30	6,400
2.00	810	2.80	2,490	3.60	4,490	4.40	6,680
2.10	980	2.90	2,730	3.70	4,760	4.50	6,960
2.20	1,170	3.00	2,970	3.80	5,030		
2.30	1,380	3.10	3,210	3.90	5,300		

NOTE—The above table is not applicable for ice or obstructed channel conditions. It is based on nine discharge measurements made during 1905–06, and is well defined between gage heights 2.1 feet and 4.0 feet. Below 2.1 feet the curve is uncertain as the two lowest measurements are incons.stent.

DAILY DISCHARGE IN SECOND-FEET, OF KANKAKEE RIVER AT MOMENCE, ILLINOIS, FOR 1905–06

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1905												
1			5,030	3,340	2,730	4,230	1,920	895	520	682	520	895
2			5,300	3,340	2,730	3,840	1,810	895	2,260	650	520	895
3			5,030	3,210	2,730	3,460	1,810	810	3,090	650	520	1,080
4			4,490	3,210	2,970	3,580	1,700	810	2,610	585	520	980
5			5,030	3,090	2,970	3,580	1,590	810	2,030	546	536	1,280
6			5,300	3,090	2,970	3,090	1,590	810	1,630	520	682	895
7			6,960	2,970	2,850	2,730	1,420	778	1,420	465	730	810
8			2,030	2,730	2,730	2,490	1,380	730	1,210	465	730	980
9			2,260	2,730	2,730	2,260	1,550	730	1,170	410	730	1,380
10			2,260	2,610	2,610	2,490	1,630	560	1,170	465	730	1,380
11			2,490	2,610	3,970	3,710	1,810	650	1,170	465	730	810
12			2,490	2,490	6,960	3,580	1,770	546	1,170	432	730	1,380
13			2,490	2,380	6,680	3,210	1,590	650	1,170	410	730	1,480
14			2,490	2,260	6,120	2,970	1,420	810	1,170	410	730	980
15			2,490	2,260	5,640	2,490	1,280	946	1,170	410	730	730
16			2,490	2,030	5,160	2,260	1,170	895	1,170	410	730	895
17			2,730	1,920	5,700	2,030	1,040	810	1,280	410	778	

DAILY DISCHARGE, IN SECOND-FEET, OF KANKAKEE RIVER AT MOMENCE, ILLINOIS—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1905												
18			2,970	1,810	5,700	2,970	1,020	730	1,280	432	810	
19			3,090	1,810	5,160	2,970	1,080	730	1,210	498	810	
20			3,090	2,140	5,030	2,490	1,130	810	1,170	520	810	
21			2,970	3,340	4,760	2,380	1,170	730	1,170	465	810	
22			2,730	3,460	4,490	2,380	1,170	730	1,080	498	730	
23			2,730	3,210	4,360	2,260	1,170	650	980	520	730	
24		2,850	3,340	2,970	4,230	2,260	1,170	650	980	520	730	
25		3,210	3,460	2,730	4,100	1,140	1,170	650	844	520	730	
26		4,760	3,460	2,730	4,760	2,140	1,170	624	810	520	760	
27		5,030	3,210	2,970	4,900	2,260	1,170	520	810	520	730	
28		4,490	3,090	2,970	4,490	2,260	1,170	520	730	520	810	
29			3,210	2,970	4,230	2,030	1,170	465	730	520	895	
30			3,210	2,970	4,490	2,030	1,170	465	650	520	895	
31			3,210		4,360		1,020	498		520		
1906												
1			2,260	2,850	1,850	810	520					
2			2,260	2,730	1,810	810	520					
3			3,710	2,730	1,700	810	520					
4			4,020	2,730	1,630	810	520					
5			3,840	2,730	1,550	810	520					
6			3,580	2,970	1,480	730	498					
7			3,460	3,020	1,380	778	443					
8			3,840	3,090	1,280	946	410					
9			3,710	4,020	1,280	1,170	410					
10			3,710	4,230	1,170	1,170	410					
11			3,460	3,920	1,170	1,170	410					
12			3,260	3,510	1,170	1,030	510					
13			3,090	3,210	1,170	980	360					
14			3,020	3,160	1,130	946	360					
15			3,020	3,020	1,020	895	360					
16			3,020	2,970	980	895	390					
17			3,090	2,850	980	810	360					
18			3,020	2,730	980	810	360					
19			2,850	2,730	980	895	360					
20			2,780	2,540	895	980	360					
21		2,210	2,610	2,490	844	946						
22		2,260	2,540	2,490	810	946						
23		2,380	2,440	2,380	810	895						
24		2,610	2,380	2,380	778	810						
25		3,210	2,440	2,260	730	730						
26		3,020	2,780	2,260	730	650						
27		2,680	3,460	2,140	730	650						
28		2,440	3,580	2,140	810	650						
29			3,260	2,030	810	624						
30			2,970	1,990	810	585						
31			2,970		810							

NOTE—Daily discharges are computed from a rating table based on nine discharge measurements made during 1905–06. It is well defined between gage heights 2.1 and 4.0 feet, but is uncertain below gage height 2.1.

Discharges for May 15 and November 13, 1905, interpolated.

MONTHLY DISCHARGE OF KANKAKEE RIVER AT MOMENCE, ILLINOIS, FOR 1905–06

[Drainage area, 2,340 square miles]

Month	Discharge in second-feet				Runoff—depth in inches of drainage area
	Maximum	Minimum	Mean	Per square mile	
1905					
February (24-28)	5,030	2,850	4,070	1.74	0.32
March	6,960	2,030	3,390	1.45	1.67
April	3,460	1,810	2,740	1.18	1.32
May	6,960	2,610	4,300	1.84	2.12
June	4,230	2,030	2,750	1.18	1.32
July	1,920	1,020	1,370	0.585	0.67
August	946	465	710	0.303	0.34
September	3,090	520	1,260	0.539	0.60
October	682	410	500	0.214	0.25
November	895	520	720	0.308	0.34
December (1-6)	1,480	730	1,050	0.448	0.27

MONTHLY DISCHARGE OF KANKAKEE RIVER, AT MOMENCE, ILLINOIS—*Concluded*

Month	Discharge in second-feet				Runoff—depth in inches on drainage area
	Maximum	Minimum	Mean	Per square mile	
1906					
February (21-28)	3,210	2,220	2,600	1.11	0.33
March	4,020	2,260	3,110	1.33	1.53
April	4,230	1,990	2,810	1.20	1.34
May	1,850	730	1,110	0.475	0.55
June	1,170	585	858	0.366	0.41
July (1-20)	520	360	425	0.182	0.14

DESPLAINES RIVER DRAINAGE BASIN

GENERAL FEATURES

Desplaines River rises in Racine County, Wisconsin, flows south, nearly parallel with Lake Michigan, to a point ten miles southwest of Chicago, Ill.; thence it turns southwest and flows about forty miles to its junction with the Kankakee to form the Illinois River. The basin is narrow in the upper part, gradually widening toward the lower portion; it comprises 1,376 square miles, of which 126 square miles are in Wisconsin, and 1,250 square miles in Illinois. The total length is about 110 miles, of which twenty miles are in Wisconsin. There are no important tributaries.

In Illinois the valley averages about one mile wide and consists of a rather shallow trough cut through limestone; this has only a thin covering of glacial drift, and the banks of the river are consequently very low. There are no forested areas in the basin.

The mean annual rainfall is about 33 inches and the mean temperature about 48°. The winters are somewhat severe; ice forms from one-half to one foot thick on the streams during portions of the winter; the snowfall averages about 36 inches.

The possibilities for storage in the basin are limited owing to the value of the land which would be flooded by reservoirs.

The Illinois and Michigan Canal, which was completed in 1848, started from the Chicago River at Chicago, entered the Desplaines Valley at Summit, crossed to the right bank of the river at Joliet, and entered the Illinois River at Peru. This canal at present is used chiefly to furnish water for power plants situated along its banks. In 1900 the Chicago Drainage Canal was opened. This canal follows the route of the Illinois and Michigan Canal to Lockport, where it enters the Desplaines River. The river was deepened and widened from Lockport to Joliet so as to take care of the flow from the canal in addition to the natural flow of the river. Between Lockport and Joliet, a distance of eight miles, there is a fall of 52 feet in the Desplaines River. This fall, combined with the large flow from the drainage canal, makes available a large amount of water power; in addition, there is another opportunity for power development in the southern part of Joliet. All of this power will be developed. At present the greater part of the power available has been developed and is being utilized at Chicago.

DESPLAINES RIVER AT RIVERSIDE, ILLINOIS

This station was maintained from May 13, 1886, to December 31, 1899, by the Chicago Sanitary District and the Chicago Drainage and Water Supply Commission. Daily gage readings have been taken and occasional discharge measurements were made during that time, from which estimates of the daily flow have been made. The detailed data from 1886 to 1896 may be found in the Journal of the Western Society of Engineers, Vol. I, June, 1896. The highest authentic water mark indicates a maximum flow of 13,500 second-feet.

The following data were taken from the 20th and 21st Annual Reports of the United States Geological Survey except that quantities have been expressed to three significant figures. Values of the runoff per square mile and depth in inches differ from those published in the above reports on account of using 573 square miles as the drainage area instead of 630. It was not possible to obtain data subsequent to 1899.

DAILY DISCHARGE, IN SECOND-FEET, OF DESPLAINES RIVER AT RIVERSIDE, ILLINOIS, FOR 1896-1898

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1896												
1	284	164	1,750	1,010	218	418	.....	176	.....	403	1	305
2	330	164	1,100	844	203	248	.....	156	.....	494	1	203
3	380	184	736	630	203	203	.....	136	.....	494	12	184
4	412	184	555	534	203	164	.....	100	.....	494	55	100
5	412	164	454	380	184	118	.....	77	.....	454	111	77
6	330	111	427	330	144	89	.....	66	.....	403	164	66
7	248	100	736	296	103	66	.....	44	.....	345	144	66
8	164	89	856	264	77	66	.....	28	.....	305	136	66
9	111	89	844	212	66	44	.....	12	.....	264	124	89
10	111	89	736	184	55	50	.....	6	.....	248	176	89
11	77	89	680	184	44	6	.....	6	.....	233	248	89
12	111	89	555	218	44	6	.....	12	.....	218	494	111
13	77	89	380	248	39	22	.....	22	.....	203	630	144
14	55	89	355	330	32	22	.....	32	.....	184	580	144
15	39	89	257	454	28	12	.....	44	276	144	454	144
16	28	89	233	466	18	22	.....	28	284	111	380	144
17	18	89	233	418	9	28	.....	18	412	89	330	144
18	9	89	257	330	6	6	.....	9	380	77	330	144
19	6	77	305	248	4	.....	.....	6	370	66	315	124
20	6	73	434	218	1	.....	.....	6	355	55	305	111
21	6	73	403	454	6	.....	.....	6	355	55	305	233
22	6	77	434	630	6	.....	.....	6	380	62	296	144
23	12	100	454	494	22	.....	.....	6	380	55	284	77
24	77	284	454	826	22	.....	.....	4	380	32	264	22
25	111	976	427	826	111	.....	.....	1	380	12	264	12
26	144	3,090	434	514	796	.....	1	1	330	6	276	6
27	144	3,470	380	454	1,390	.....	12	.....	296	6	403	6
28	156	4,190	380	395	904	.....	44	.....	284	4	427	6
29	156	3,500	670	330	630	.....	62	.....	284	4	248	44
30	164	.....	1,470	246	454	.....	89	.....	330	1	380	44
31	164	.....	1,360	.....	526	.....	124	.....	.....	1	.....	44
1897												
1	100	514	380	3,410	1,840	44	89	6	.....	.....	.....	6
2	284	474	355	2,580	1,340	39	89	6	.....	.....	.....	6
3	2,900	424	305	2,230	1,070	28	89	1	.....	.....	.....	6
4	7,720	418	203	1,920	934	28	89	1	.....	.....	.....	9
5	6,270	418	164	1,620	826	32	89	.....	.....	.....	.....	6
6	5,090	418	248	1,340	680	12	84	.....	.....	.....	.....	6
7	8,660	434	330	1,150	534	12	73	.....	.....	.....	.....	6
8	8,240	466	454	976	418	9	66	.....	.....	.....	.....	6
9	6,850	494	916	796	330	12	44	.....	.....	.....	.....	6
10	4,940	454	1,880	670	248	22	39	.....	.....	.....	.....	6
11	3,430	434	2,290	555	218	22	22	.....	.....	.....	.....	6
12	2,060	434	2,990	494	184	12	22	.....	.....	.....	.....	6
13	1,250	403	2,490	427	124	6	22	.....	.....	.....	.....	6
14	1,360	474	2,880	427	111	6	22	.....	.....	.....	1	6
15	1,360	534	2,060	446	111	6	22	.....	.....	.....	6	6
16	1,100	630	1,700	427	111	5	22	.....	.....	.....	12	6
17	1,790	736	1,620	494	111	44	22	.....	.....	.....	12	6
18	3,230	916	1,580	514	95	5	22	.....	.....	.....	6	6
19	3,810	1,040	1,640	454	89	60	18	.....	.....	.....	6	4

DAILY DISCHARGE, IN SECOND-FEET, OF DESPLANIES RIVER AT RIVERSIDE, ILLINOIS—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1897												
20	3,030	1,110	3,810	380	77	555	18	.....	.....	.....	6	4
21	3,290	1,790	6,730	305	66	494	12	.....	.....	.....	12	1
22	1,880	2,140	7,380	84	73	380	12	.....	.....	.....	39	.....
23	1,450	2,060	7,180	380	73	284	9	.....	.....	.....	22	.....
24	1,510	1,750	5,920	796	89	276	9	.....	.....	.....	12	.....
25	1,380	1,470	4,190	1,470	77	233	6	.....	.....	.....	6	.....
26	1,320	1,040	3,050	2,060	77	227	12	.....	.....	.....	6	.....
27	1,310	1,290	2,550	1,530	66	212	12	.....	.....	.....	6	.....
28	1,170	796	2,440	1,070	66	184	6	.....	.....	.....	6	.....
29	964	.....	2,770	856	55	124	4	.....	.....	.....	6	.....
30	754	.....	3,610	1,790	44	89	1	.....	.....	.....	6	.....
31	605	.....	4,020	.....	44	.....	1	.....	.....	.....	.....	.....
1898												
1	.....	75	350	880	98	120	1,060	75	.....	10	75	64
2	.....	98	300	700	98	120	940	69	.....	10	69	53
3	.....	98	430	625	98	120	650	58	.....	10	58	53
4	.....	98	260	550	98	109	430	47	.....	10	53	53
5	.....	98	400	430	98	98	300	36	.....	10	75	47
6	.....	86	450	350	98	98	230	20	.....	10	69	47
7	.....	64	470	260	98	86	180	5	.....	10	53	53
8	.....	64	1,000	230	98	75	160	5	.....	10	64	53
9	.....	86	2,370	245	92	75	130	3	.....	10	75	10
10	.....	120	3,520	300	86	75	109	3	.....	10	120	10
11	.....	1,090	6,000	430	86	98	98	.....	.....	15	790	10
12	15	3,960	8,740	375	81	109	92	.....	.....	20	850	10
13	47	4,110	8,960	350	81	120	75	.....	.....	20	600	.....
14	75	3,550	7,700	230	75	160	69	.....	5	20	600	.....
15	98	2,370	5,950	215	75	200	58	10	10	25	324	.....
16	98	1,780	4,450	180	69	230	53	36	30	25	350	.....
17	98	1,320	3,420	140	75	215	30	47	30	30	300	.....
18	53	1,120	2,370	160	86	200	25	58	30	30	400	.....
19	53	1,500	4,400	160	86	180	20	75	20	36	388	.....
20	75	1,650	6,950	160	98	180	20	64	10	41	338	75
21	260	1,740	5,520	160	230	180	15	53	10	41	300	300
22	400	1,570	3,960	160	260	160	15	30	10	47	230	450
23	510	1,350	2,920	160	245	120	10	15	10	47	160	350
24	400	1,060	2,320	160	215	120	10	10	10	53	140	300
25	300	1,000	1,740	140	200	400	10	5	10	64	140	260
26	200	760	1,320	120	180	3,960	10	3	10	75	120	245
27	120	510	1,650	109	160	5,000	10	3	10	98	98	300
28	103	430	3,690	109	140	4,620	10	.....	10	109	75	120
29	98	.....	3,160	98	140	3,130	30	.....	10	109	75	98
30	81	.....	2,280	98	120	2,050	64	.....	10	92	64	64
31	75	.....	1,200	.....	120	.....	75	.....	.....	75	.....	53

MONTHLY DISCHARGE OF DESPLAINES RIVER AT RIVERSIDE, ILLINOIS, FOR 1886–90; 1892–98

[Drainage area, 573 square miles]

Month	Discharge in second-feet				Runoff depth in inches on drainage area
	Maximum	Minimum	Mean	Per square mile	
1886					
May (13–31)	2,120	236	1,070	1.87	1.32
June	268	7	87	0.152	0.17
July	221	0	77	0.134	0.16
August	51	0	5	0.0087	0.01
September	128	0	16	0.028	0.03
October	70	0	4	0.0070	0.01
November	0	0	0	0.0000	0.00
December	0	0	0	0.0000	0.00
1887					
January	2,280	0	481	0.840	0.97
February	9,650	650	3,380	5.90	6.14
March	3,160	280	1,470	2.56	2.95
April	530	120	291	0.508	0.57
May	200	20	69	0.120	0.14
June	45	0	9	0.015	0.02
July	490	0	182	0.317	0.37

MONTHLY DISCHARGE OF DESPLAINES RIVER AT RIVERSIDE, ILLINOIS—*Concluded*

Month	Discharge in second-feet				Runoff—depth in inches on drainage area
	Maximum	Minimum	Mean	Per square mile	
1887					
August	160	60	96	0.168	0.19
September	215	80	122	0.213	0.24
October	450	245	342	0.596	0.69
November (1-26)	325	215	266	0.464	0.45
December (4-31)	1,000	415	857	1.51	1.56
The year	9,650	0	630	1.10	14.30
1888					
January	850	600	748	1.32	1.52
February	4,110	600	1,510	2.63	2.84
March	4,040	1,280	2,640	4.61	5.32
September	110	9	19	0.033	0.01
October	0	0	0	0.0000	0.00
November	0	0	0	0.0000	0.00
December	0	0	0	0.0000	0.00
1889					
January	470	0	156	0.272	0.31
February	90	0	8	0.014	0.02
March	625	0	233	0.407	0.47
April	1,350	5	635	1.11	1.24
May	470	0	214	0.373	0.43
June	2,240	10	1,110	1.94	2.16
July	3,620	0	587	1.04	1.20
August	1,120	0	245	0.427	0.49
September	0	0	0	0.0000	0.00
October	0	0	0	0.0000	0.00
November	0	0	0	0.0000	0.00
December (1-29)	470	0	204	0.356	0.37
The year	3,620	0	284	0.495	6.69
1890					
July	80	5	54	0.094	0.11
August	45	0	10	0.017	0.02
September	45	0	7	0.012	0.01
October	36	0	11	0.109	0.02
November	90	0	20	0.035	0.04
December (1-27)	54	0	20	0.035	0.04
1892*					
May	10,100	550	2,480	4.33	4.99
June	12,000	1,420	3,410	5.95	6.64
July	20,190	45	433	0.756	0.87
August	60	0	14	0.024	0.03
September	60	0	9	0.016	0.02
October	10	0	2	0.0035	0.004
November	30	0	12	0.021	0.02
December	70	0	22	0.038	0.04
1893					
January	10	0	5	0.0087	0.01
February	1,000	7	187	0.326	0.34
March	7,100	610	2,820	4.92	5.67
April	3,550	160	1,010	1.76	1.96
May	2,640	120	716	1.25	1.44
June	2,700	120	771	1.34	1.50
July	180	14	77	0.134	0.15
August	10	0	1	0.0017	0.002
September	0	0	0	0.0000	0.00
October	110	0	10	0.017	0.02
November	10	0	1	0.0017	0.002
December	550	0	145	0.253	0.29
The year	7,100	0	479	0.836	11.38
1894					
January	1,390	35	274	0.478	0.55
February	2,370	120	642	1.12	1.17
March	6,960	80	1,670	2.91	3.36
April	1,460	110	430	0.750	0.84
May	3,160	160	1,040	1.81	2.09
June	160	9	42	0.073	0.08
July	22	9	0	0.0000	0.00

MONTHLY DISCHARGE OF DESPLAINES RIVER, AT RIVERSIDE, ILLINOIS—*Concluded*

Month	Discharge in second-feet				Runoff—depth in inches on drainage area
	Maximum	Minimum	Mean	Per square mile	
1894					
August	0	0	0	0.0000	0.00
September	203	0	35	0.061	0.07
October	0	0	0	0.0000	0.00
November	12	0	5	0.0087	0.01
December	44	0	10	0.017	0.02
The year	6,960	0	346	0.604	8.23
1895					
January	0	0	0	0.0000	0.00
February	2,110	0	116	0.202	0.21
March	1,920	77	386	0.673	0.78
April	706	8	166	0.290	0.32
May	233	6	61	0.106	0.12
June	4	0	0	0.0000	0.00
July	0	0	0	0.0000	0.00
August	71	0	4	0.0070	0.01
September	184	0	32	0.056	0.06
October	0	0	0	0.0000	0.00
November	6	0	1	0.0017	0.002
December	6,270	0	984	1.72	1.98
The year	6,270	0	146	0.255	3.48
1896					
January	412	6	140	0.244	2.81
February	4,190	73	619	1.08	1.16
March	1,750	233	604	1.05	1.21
April	1,010	184	433	0.756	0.84
May	1,390	1	212	0.370	0.43
June	418	0	53	0.092	0.10
July	124	0	11	0.019	0.02
August	176	0	33	0.058	0.07
September	412	0	182	0.318	0.35
October	494	1	180	0.314	0.36
November	630	1	271	0.473	0.53
December	305	6	103	0.180	0.21
The year	4,190	0	237	0.413	9.09
1897					
January	8,660	100	2,890	5.02	5.79
February	2,140	418	841	1.47	1.53
March	7,380	164	2,520	4.40	5.07
April	3,410	284	1,060	1.85	2.06
May	1,840	44	328	0.572	0.66
June	630	6	149	0.260	0.29
July	89	1	34	0.059	0.07
August	6	0	0	0.0000	0.00
September	0	0	0	0.0000	0.00
October	0	0	0	0.0000	0.00
November	39	0	6	0.010	0.01
December	6	0	4	0.0070	0.01
The year	8,660	0	652	1.14	15.50
1898					
January	510	0	102	0.178	0.20
February	4,110	64	1,130	1.97	2.05
March	8,960	260	3,170	5.53	6.38
April	880	98	276	0.482	0.54
May	260	69	122	0.213	0.25
June	5,000	75	747	1.30	1.45
July	1,060	10	161	0.281	0.32
August	75	0	24	0.042	0.05
September	30	0	8	0.014	0.02
October	109	10	26	0.0045	0.05
November	850	53	238	0.415	0.46
December	450	0	99	0.173	0.20
The year	8,960	0	509	0.888	11.97

* No figures for 1891.

DESPLAINES RIVER NEAR CHANNAHON, ILLINOIS

(Above mouth of Jackson Creek)

Location.—Just above the mouth of Jackson Creek, two miles east of Channahon, Ill., near the west line of Sec. 15, T. 37 N., R. 9 E.

Records available.—January 1, 1903, to July 24, 1906.

Drainage area.—Nine hundred and ninety-six square miles.

Gage.—Vertical staff gage graduated to feet and tenths below the Chicago datum. The elevation of the Chicago datum is 580.2 feet above sea level.

Channel.—Gravel; probably permanent.

Discharge measurements.—Made from a boat and cable.

Winter flow.—Ice conditions may affect the relation between gage height and discharge during periods in December, January, February, and March.

Regulation.—The flow past this station is increased by that from the Chicago Drainage Canal.

Accuracy.—No measurements were made during 1905 and 1906, and no daily discharges or monthly estimates were published for these years. So far as known, the 1904 rating table applies to 1905 and 1906.

DISCHARGE MEASUREMENTS OF DESPLAINES RIVER ABOVE THE MOUTH OF JACKSON CREEK, NEAR CHANNAHON, ILLINOIS IN 1903–04

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1903		*Feet*	*Sq.-ft.*	*Feet*	*Sec.-ft.*
March 14	E. H. Heilbron			80.45	8,081
April 18	E. H. Heilbron			82.90	4,548
April 25	E. H. Heilbron			82.32	6,114
May 8	E. H. Heilbron			83.15	5,008
July 11	E. H. Heilbron			82.90	5,447
August 30	E. H. Heilbron			82.90	5,086
September 26	E. H. Heilbron			82.80	5,892
October 28	F. W. Hanna			82.78	5,666
November 25	F. W. Hanna			83.05	5,307
December 16	E. H. Heilbron			82.90	*4,380
1904					
January† 21	E. H. Heilbron	375	5,133	78.00	8,535
January† 22	E. H. Heilbron	440	6,468	75.20	7,062
March 24	E. H. Heilbron	440	6,240	76.06	16,330
March 24	E. H. Heilbron	437	6,324	76.10	16,230
March 24	E. H. Heilbron	430	6,057	76.32	15,530
March 25	E. H. Heilbron	465	6,654	74.80	17,340
March 25	E. H. Heilbron	477	6,813	71.60	17,940
March 25	E. H. Heilbron	485	7,112	74.10	20,080
March 27	E. H. Heilbron	450	6,386	75.64	15,820
April 3	E. H. Heilbron	384	5,071	78.80	10,610
April 14	E. H. Heilbron	360	3,936	81.80	5,548

* Partly frozen.
† Partly frozen. Ice gorge below Kankakee River.

DAILY GAGE HEIGHT, IN FEET, OF DESPLAINES RIVER ABOVE MOUTH OF JACKSON CREEK NEAR CHANNAHON, ILLINOIS, 1903–06

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903												
1	82.32	.....	.....	82.54	83.25	82.83	83.11	82.89	82.91	82.99	82.80	82.52
2	82.42	.....	.....	82.55	83.12	82.90	82.90	82.95	82.94	82.93	82.65	82.36
3	82.35	.....	.....	82.58	83.10	82.98	82.88	82.91	82.94	83.03	83.05	82.42
4	82.30	.....	.....	82.80	83.14	82.93	83.10	82.71	82.97	82.82	83.03	82.36
5	82.25	.....	.....	82.82	83.11	82.80	83.00	82.75	82.90	82.70	83.00	82.45
6	82.30	.....	.....	82.65	83.15	82.80	83.10	83.18	83.15	82.91	83.05	82.50
7	82.20	.....	.....	82.74	83.24	82.93	83.00	83.15	83.10	82.87	83.10	82.38
8	82.20	.....	.....	82.91	83.19	82.83	83.00	83.23	83.16	82.70	83.19	82.39
9	78.17	.....	.....	83.05	83.17	82.85	83.00	83.18	83.15	82.58	83.16	82.51
10	78.63	.....	.....	82.74	83.07	82.93	83.00	82.90	82.46	82.55	83.00	82.54
11	79.05	.....	.....	81.05	83.00	82.83	82.90	82.91	82.25	82.57	83.05	83.28
12	79.60	.....	.....	80.94	83.00	82.90	83.00	83.03	82.90	82.69	83.13	83.31
13	80.00	.....	.....	80.72	83,00	82.95	83.00	82.98	82.93	82.78	83.00	83.62
14	80.35	.....	.....	79.25	83.13	82.88	82.90	82.95	82.68	82.78	83.15	83.28
15	.....	.....	81.12	79.00	83.20	82.85	82.90	83.10	81.25	82.79	84.50	81,88
16	.....	.....	81.31	79.30	83.24	82.92	82.90	83.23	80.75	82.84	83.05	82.05
17	.....	.....	81.69	79.90	83.31	82.94	82.90	83.35	81.45	82.95	83.15	.....
18	.....	.....	81.78	80.35	83.22	82.92	82.20	83.20	81.34	82.87	83.20	82.17
19	.....	.....	81.72	80.95	83.24	82.94	82.60	83.20	81.40	82.93	83.15	82.79
20	.....	.....	80.96	81.26	83.14	82.94	82.80	83.20	81.68	82.86	83.12	81.34
21	.....	.....	79.90	81.72	83.20	83.05	82.80	83.13	81.65	82.80	82.13	81.70
22	.....	.....	79.50	81.97	83.05	82.90	82.90	83.28	82.30	82.84	82.13	81.35
23	.....	.....	80.01	82.10	83.09	83.03	82.90	83.02	82.35	82.82	82.10	81.72
24	.....	.....	80.65	82.20	83.10	82.98	82.90	83.00	82.50	82.99	82.11	81.88
25	.....	.....	80.85	82.25	83.05	83.05	83.00	83.04	82.72	82.73	82.50	81.86
26	.....	.....	81.30	82.61	83.13	83.00	82.98	83.11	82.76	82.85	82.70	81.40
27	.....	.....	81.65	82.65	83.07	83.07	82.92	82.93	82.80	82.93	82.82	81.40
28	.....	.....	81.92	82.75	83.02	83.15	82.92	82.60	82.85	82.82	82.68	81.45
29	.....	.....	82.06	83.20	83.02	83.07	82.87	82.65	82.80	82.93	82.32	81.30
30	.....	.....	82.18	83.25	82.82	83.10	82.87	83.00	82.97	82.88	82.38	81.00
31	.....	.....	82.30	.....	82.89	.....	82.90	83.00	.....	82.83	.....	80.56
1904												
1	81.01	78.47	76.65	77.78	82.59	82.92	83.29	82.98	82.98	83.53	83.35	83.10
2	80.76	78.85	76.96	78.04	82.61	82.88	83.38	83.20	83.02	83.58	83.80	82.97
3	80.60	78.80	75.17	78.91	82.65	82.91	83.22	83.10	83.05	83.60	83.75	83.03
4	80.62	78.97	76.65	79.68	82.77	82.95	83.15	83.11	83.10	83.64	83.01	82.90
5	80.84	78.56	77.96	80.84	78.56	8.90	83.26	83.03	83.05	83.60	83.05	82.84
6	80.79	78.15	78.13	80.45	82.59	82.95	83.30	83.03	83.16	83.62	83.20	82.90
7	80.98	75.55	76.91	80.90	82.65	82.80	83.20	83.02	82.96	83.68	83.01	82.81
8	81.58	75.02	77.96	80.70	82.68	83.00	83.10	83.11	83.02	83.50	83.51	82.75
9	81.20	76.61	78.52	81.16	82.53	83.38	83.11	83.10	83.65	83.62	83.00	82.77
10	80.41	76.89	78.52	81.10	82.60	83.42	83.36	83.05	83.65	83.58	82.98	84.00
11	80.51	77.44	78.46	81.22	82.70	83.48	83.10	83.12	83.62	84.15	83.01	82.97
12	80.60	78.08	78.78	81.32	82.78	83.50	83.10	83.08	83.72	83.55	83.12	82.65
13	81.04	78.53	78.78	81.70	82.86	83.50	83.19	83.04	83.62	83.64	82.82	82.95
14	82.28	78.75	78.74	81.78	82.75	84.02	83.18	83.36	83.22	83.58	83.09	82.84
15	80.63	79.38	78.84	81.85	82.69	83.85	83.15	83.24	83.67	83.00	82.99	82.83
16	80.43	79.50	79.78	82.35	82.70	83.48	83.05	83.08	83.90	83.00	83.06	82.97
17	80.68	79.68	80.70	82.38	82.65	83.80	83.05	83.18	83.70	82.97	82.97	82.96
18	80.70	79.75	80.96	82.44	82.60	83.68	83.16	83.31	82.87	83.60	83.15	83.05
19	80.82	79.78	79.42	82.35	82.69	83.70	83.22	83.04	82.95	83.60	83.05	82.94
20	80.50	79.90	78.47	82.56	82.76	83.78	83.18	83.72	83.68	83.82	82.99	82.98
21	78.16	79.85	78.55	82.58	82.87	83.75	83.11	83.92	83.71	83.88	83.16	83.02
22	75.06	79.95	76.31	82.62	82.97	83.65	83.00	83.05	83.86	83.53	83.08	83.00
23	75.30	79.95	75.27	82.68	83.25	83.82	83.07	83.10	83.80	83.87	83.17	82.85
24	75.54	79.95	76.15	81.44	83.15	84.00	83.14	82.91	83.80	83.77	83.01	82.77
25	75.52	80.20	74.37	81.38	82.95	83.90	83.02	82.88	83.70	83.89	83.00	82.85
26	75.86	80.20	74.30	81.05	82.95	83.82	83.05	82.90	83.60	83.88	83.09	83.07
27	76.74	80.17	75.95	81.40	83.00	83.89	82.95	82.95	83.68	83.87	84.40	83.00
28	77.37	80.15	76.92	81.79	82.98	83.57	83.00	83.00	83.01	83.83	84.25	83.13
29	77.74	78.46	77.85	82.13	83.00	83.53	83.00	82.92	83.02	84.50	84.10	82.38
30	77.92	.....	78.86	82.41	82.72	83.20	83.00	82.90	83.48	83.87	83.95	82.70
31	78.20	.....	78.60	.....	82.90	.....	82.98	83.00	.....	83.83	.....	82.87
1905												
1	82.74	80.8	78.5	82.52	82.92	83.72	83.5	82.95	83.15	83.42	83.75	83.15
2	82.85	80.3	79.7	82.58	82.95	83.7	83.55	83.1	82.05	83.32	83.9	83.15
3	83.18	79.8	.....	82.25	83.08	83.65	83.45	83.15	82.9	83.42	83.85	83.35
4	83.05	80.0	82.2	82.82	83.15	82.4	83.4	83.22	82.4	83.3	83.88	83.2
5	82.89	80.1	82.6	82.8	83.3	82.52	83.3	83.4	82.5	83.35	83.8	83.35
6	82.88	80.2	82.5	82.85	83.32	82.98	83.45	83.5	82.52	83.3	83.1	83.28
7	83.1	.....	82.68	82.7	83.58	83.1	.....	83.3	.....	83.3	83.1	83.4
8	33.35	82.1	82.72	82.92	83.48	83.3	83.42	83.3	82.7	83.3	83.2	83.28
9	82.92	.....	82.7	82.98	83.6	83.45	83.8	83.0	82.95	83.3	83.68	83.22
10	82.92	79.3	82.85	82.98	83.4	82.65	83.85	83.3	83.08	83.2	83.78	83.4
11	82.78	.....	82.75	83.48	82.3	81.8	83.88	83.35	83.02	83.3	83.88	83.35

DAILY GAGE HEIGHT, IN FEET, OF DESPLAINES RIVER ABOVE MOUTH OF JACKSON CREEK NEAR CHANNAHON, ILLINOIS—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Spet.	Oct.	Nov.	Dec.
1905												
12	82.48	.....	82.76	84.85	78.6	82.58	83.85	83.3	83.1	83.4	83.9	83.32
13	82.48	.....	82.88	84.2	78.5	82.88	83.9	83.2	83.05	83.42	83.85	83.38
14	82.2	.....	82.7	83.65	79.2	83.05	83.3	83.2	83.2	83.35	83.85	83.35
15	81.2	.....	82.95	83.6	79.5	82.12	83.8	83.25	83.2	83.42	84.08	83.45
16	80.5	79.8	82.88	83.6	80.0	83.18	83.3	83.25	83.15	83.3	84.38	83.38
17	80.8	.....	82.6	83.62	80.4	83.25	83.38	83.35	83.15	83.5	84.35	83.38
18	81.15	.....	82.38	83.6	81.3	83.12	83.55	83.25	93.15	.....	84.35	83.28
19	81.6	79.75	82.05	83.55	92.18	83.1	83.4	83.12	83.2	83.25	83.8	83.4
20	81.95	.....	82.08	83.6	82.5	83.18	83.25	83.22	83.15	83.15	84.35	.....
21	82.5	.....	82.18	81.6	83.0	83.25	83.55	83.18	83.2	83.05	84.58	83.25
22	82.68	.....	82.12	82.4	82.92	83.25	83.50	83.12	83.3	82.98	84.6	83.6
23	82.65	79.9	82.02	82.65	83.32	83.22	83.48	82.95	83.2	83.22	84.6	83.6
24	82.85	.....	81.75	82.62	83.5	.....	83.65	82.98	83.22	82.88	84.4	83.6
25	81.45	.....	81.95	82.78	83.6	83.5	83.55	83.12	83.2	82.88	84.4	83.42
26	80.6	.....	82.0	82.8	83.6	83.28	83.3	83.2	83.32	83.05	84.1	83.5
27	80.4	80.2	82.05	82.55	83.72	83.35	83.35	83.18	83.1	83.3	83.5	83.5
28	80.4	.....	82.28	82.75	83.75	83.58	83.25	83.18	83.25	83.55	83.1	83.35
29	81.15	.....	82.28	82.82	83.68	83.78	83.0	83.1	83.38	83.08	83.4	83.5
30	81.05	.....	82.32	83.0	83.3	83.52	83.08	83.15	83.35	83.18	83.25	83.52
31	81.05	.....	82.5	.....	83.62	.....	82.88	83.15	.....	83.8	.....	83.48
1906												
1	83.42	82.18	81.95	.....	83.15	83.25	84.20	.....	.....	.....	.....	.....
2	83.40	82.65	81.95	.....	82.95	83.22	84.25	.....	.....	.....	.....	.....
3	83.42	82.58	81.28	82.90	82.90	83.15	84.18	.....	.....	.....	.....	.....
4	83.30	82.68	81.44	82.90	82.82	83.16	84.22	.....	.....	.....	.....	.....
5	83.50	82.44	81.36	82.90	82.90	83.15	84.12	.....	.....	.....	.....	.....
6	83.30	82.52	81.75	82.92	82.95	83.15	84.18	.....	.....	.....	.....	.....
7	83.05	82.55	82.05	82.95	82.98	83.12	84.28	.....	.....	.....	.....	.....
8	83.00	82.61	82.25	82.60	83.00	83.22	84.08	.....	.....	.....	.....	.....
9	83.18	82.68	82.32	82.22	83.15	83.26	84.10	.....	.....	.....	.....	.....
10	82.82	82.82	82.42	81.82	83.16	83.28	84.05	.....	.....	.....	.....	.....
11	82.80	83.00	82.45	81.84	83.08	83.25	83.95	.....	.....	.....	.....	.....
12	82.78	82.82	82.50	81.90	83.24	83.20	83.92	.....	.....	.....	.....	.....
13	82.68	82.86	82.75	82.15	83.25	83.26	83.82	.....	.....	.....	.....	.....
14	82.88	82.45	83.00	82.25	83.10	83.24	84.02	.....	.....	.....	.....	.....
15	82.95	82.02	82.50	82.36	83.15	83.22	83.82	.....	.....	.....	.....	.....
16	83.05	82.59	83.00	82.42	82.90	83.28	83.88	.....	.....	.....	.....	.....
17	82.85	82.56	82.98	82.58	83.05	83.28	84.00	.....	.....	.....	.....	.....
18	82.85	82.68	82.98	82.52	83.12	83.24	83.92	.....	.....	.....	.....	.....
19	82.72	82.74	82.88	82.62	83.18	83.21	83.90	.....	.....	.....	.....	.....
20	82.70	82.78	83.40	82.78	83.15	83.18	83.85	.....	.....	.....	.....	.....
21	82.36	80.98	83.35	82.80	83.11	83.25	83.65	.....	.....	.....	.....	.....
22	80.60	81.70	83.50	82.93	83.18	83.30	83.20	.....	.....	.....	.....	.....
23	80.98	81.45	82.90	83.00	83.24	83.22	83.42	.....	.....	.....	.....	.....
24	81.72	80.25	83.20	83.08	82.98	83.22	83.85	.....	.....	.....	.....	.....
25	81.92	79.82	83.05	83.05	83.10	83.66	.....	.....	.....	.....	.....	.....
26	81.84	80.48	82.80	83.00	83.15	84.20	.....	.....	.....	.....	.....	.....
27	81.98	81.20	81.90	82.98	.....	84.25	.....	.....	.....	.....	.....	.....
28	82.00	81.60	81.90	83.09	83.10	84.25	.....	.....	.....	.....	.....	.....
29	82.00	.....	81.80	83.10	83.30	.....	.....	.....	.....	.....	.....	.....
30	81.82	.....	81.85	83.16	83.22	84.20	.....	.....	.....	.....	.....	.....
31	81.21	.....	82.30	.....	83.15	.....	.....	.....	.....	.....	.....	.....

NOTE—Gage heights are below Chicago datum and therefore a decrease in gage height means an increase in state and vice versa.

Ice conditions January 1, to about March 15, 1904, and December 11-31, 1904; river frozen February 7-28, 1904: gage heights are to water surface in a hole in the ice.

RATING TABLE FOR DESPLAINES RIVER ABOVE THE MOUTH OF JACKSON CREEK NEAR CHANNAHON, ILLINOIS, FROM MARCH 13, 1903–DECEMBER 31, 1904

Gage heigh	Dis-charge	Gage heigh	Dis-charge	Gage heigh	Dis-charge	Gage heigh	Dis charge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
84.0	4,480	83.4	4,945	82.8	5,580	82.2	6,300
83.9	4,545	83.3	5,040	82.7	5,700	82.1	6,420
83.8	4,615	83.2	5,140	82.6	5,820	82.0	6,545
83.7	4,690	83.1	5,245	82.5	5,940	81.8	6,800
83.6	4,770	83.0	5,355	82.4	6,060	81.6	7,060
83.5	4,855	82.9	5,465	82.3	6,180	81.4	7,320

RATING TABLE FOR DESPLAINES RIVER ABOVE THE MOUTH OF JACKSON CREEK NEAR CHANNAHON, ILLINOIS—*Concluded*

Gage heigh	Discharge	Gage heigh	Discharge	Gage heigh	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
81.2	7,580	80.0	9,210	78.5	11,620	75.5	16,870
81.0	7,840	79.8	9,510	78.0	12,470	75.0	17,770
80.8	8,100	79.6	9,830	77.5	13,320	74.0	19,570
80.6	8,370	79.4	10,150	77.0	14,170	73.0	21,370
80.4	8,650	79.2	10,470	76.5	15,070		
80.2	8,930	79.0	10,790	76.0	15,970		

NOTE—The above table is not applicable for ice or obstructed channel conditions. It is based on twenty-one discharge measurements made during 1903-04, and is not well defined. Gage heights are below Chicago datum and therefore an increase in gage height means a decrease in stage.

DAILY DISCHARGE IN SECOND-FEET, OF DESPLAINES RIVER ABOVE MOUTH OF JACKSON CREEK NEAR CHANNAHON, ILLINOIS, FOR 1903-04

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903												
1	.....	.....	.....	5,890	5,090	5,550	5,230	5,480	5,450	5,370	5,580	5,920
2	.....	.....	.....	5,880	5,220	5,460	5,460	5,410	5,420	5,430	5,760	6,110
3	.....	.....	.....	5,840	5,240	5,380	5,490	5,450	5,420	5,320	5,300	6,040
4	.....	.....	.....	5,580	5,200	5,430	5,240	5,690	5,390	5,560	5,320	6,110
5	.....	.....	.....	5,560	5,230	5,580	5,360	5,640	5,460	5,700	5,360	6,000
6	.....	.....	.....	5,760	5,190	5,580	5,240	5,160	5,190	5,450	5,300	5,940
7	.....	.....	.....	5,650	5,100	5,430	5,360	5,190	5,240	5,500	5,240	6,080
8	.....	.....	.....	5,450	5,150	5,550	5,360	5,110	5,180	5,700	5,150	6,070
9	.....	.....	.....	5,300	5,170	5,520	5,360	5,160	5,190	5,840	5,180	5,930
10	.....	.....	.....	5,650	5,280	5,430	5,360	5,460	5,990	5,880	5,360	5,890
11	.....	.....	.....	7,780	5,360	5,550	5,460	5,450	6,240	5,860	5,300	5,060
12	.....	.....	.....	7,920	5,360	5,460	5,360	5,320	5,460	5,710	5,210	5,030
13	.....	.....	.....	8,00	5,360	5,410	5,360	5,380	5,430	5,600	5,360	4,750
14	.....	.....	.....	10,400	5,210	5,490	5,460	5,410	5,720	5,600	5,190	5,060
15	.....	.....	.....	10,800	5,140	5,520	5,460	5,240	7,520	5,590	4,200	6,700
16	.....	.....	7,440	10,400	5,100	5,440	5,460	5,110	8,160	5,530	5,300	6,480
17	.....	.....	6,940	9,360	5,030	5,420	5,460	4,990	7,260	5,410	5,190	6,410
18	.....	.....	6,830	8,720	5,120	5,440	6,300	5,140	7,400	5,500	5,140	6,340
19	.....	.....	6,900	7,900	5,100	5,420	5,820	5,140	7,320	5,430	5,190	5,590
20	.....	.....	7,890	7,500	5,00	5,420	5,580	5,140	6,960	5,510	5,220	7,400
21	.....	.....	9,360	6,900	5,140	5,300	5,580	5,210	7,000	5,580	6,380	6,930
22	.....	.....	9,990	6,580	5,300	5,460	5,460	5,060	6,180	5,530	6,380	7,380
23	.....	.....	9,200	6,420	5,260	5,320	5,460	5,330	6,120	5,560	6,420	6,900
24	.....	.....	8,300	6,300	5,140	5,380	5,460	5,360	5,940	5,370	6,410	6,700
25	.....	.....	8,040	6,240	5,300	5,300	5,360	5,310	5,680	5,660	5,940	6,720
26	.....	.....	7,450	5,810	5,210	5,360	5,380	5,230	5,630	5,520	5,700	7,320
27	.....	.....	7,000	5,760	5,280	5,280	5,440	5,430	5,580	5,430	5,560	7,320
28	.....	.....	6,640	5,640	5,330	5,190	5,440	5,820	5,520	5,560	5,720	7,260
29	.....	.....	6,470	5,140	5,330	5,280	5,500	5,760	5,580	5,430	5,020	7,450
30	.....	.....	6,320	5,090	5,560	5,240	5,500	5,360	5,390	5,490	6,080	7,840
31	.....	.....	6,180	.....	5,480	.....	5,460	5,360	.....	5,550	.....	8,430
1904												
1	.....	.....	.....	12,800	5,830	5,440	5,050	5,380	5,380	4,830	4,580	5,240
2	.....	.....	.....	12,400	5,810	5,490	4,960	5,40	5,330	4,790	4,620	5,390
3	.....	.....	.....	10,900	5,760	5,450	5,120	5,240	5,300	4,770	4,650	5,320
4	.....	.....	.....	9,700	5,620	5,410	5,190	5,230	5,240	4,740	5,340	5,460
5	.....	.....	.....	8,960	5,650	5,460	5,080	5,300	5,320	4,770	5,300	5,530
6	.....	.....	.....	8,580	5,830	5,410	5,040	5,320	5,180	4,750	5,140	5,460
7	.....	.....	.....	7,970	5,760	5,580	5,140	5,330	5,400	4,710	5,340	5,570
8	.....	.....	.....	8,230	5,720	5,360	5,140	5,230	5,330	4,860	4,850	5,640
9	.....	.....	.....	7,630	5,900	4,960	5,130	5,240	4,730	4,750	5,360	5,620
10	.....	.....	.....	7,710	5,820	4,930	4,980	5,300	4,730	4,790	5,380	4,480
11	.....	.....	.....	7,550	5,700	4,870	5,240	5,220	4,750	4,390	5,340	5,390
12	.....	.....	.....	7,420	5,600	4,860	5,240	5,270	4,680	4,810	5,220	5,760
13	.....	.....	.....	6,930	5,510	4,860	5,150	5,310	4,750	4,740	5,560	5,410
14	.....	.....	.....	6,830	5,640	4,470	5,160	4,980	5,120	4,790	5,260	5,530
15	.....	.....	.....	6,740	5,710	4,580	5,190	5,100	4,710	5,360	5,370	5,550
16	.....	.....	9,540	6,120	5,700	4,870	5,300	5,270	4,540	5,360	5,290	5,390
17	.....	.....	8,230	6,080	5,760	4,620	5,300	5,160	4,690	5,390	5,390	5,400
18	.....	.....	7,890	6,010	5,820	4,710	5,180	5,030	5,500	4,770	5,190	5,300
19	.....	.....	10,100	6,120	5,710	4,690	5,120	5,310	5,410	4,770	5,300	5,420
20	.....	.....	11,700	5,870	5,630	4,630	5,160	4,680	4,710	4,600	5,370	5,380
21	.....	.....	11,500	5,840	5,500	4,650	5,230	4,530	4,680	4,560	5,180	5,330
22	.....	.....	15,400	5,800	5,390	4,730	5,360	5,300	4,570	4,830	5,270	5,360
23	.....	.....	17,300	5,720	5,090	4,600	5,280	5,240	4,620	4,570	5,170	5,520

DAILY DISCHARGE IN SECOND-FEET, OF DESPLAINES RIVER ABOVE MOUTH OF JACKSON CREEK NEAR CHANNAHON, ILLINOIS—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1904												
24	.....	.....	15,700	7,270	5,190	4,480	5,200	5,450	4,620	4,640	5,340	5,620
25	.....	.....	18,900	7,350	5,410	4,540	5,330	5,490	4,690	4,550	5,360	5,520
26	.....	.....	19,000	7,780	5,410	4,600	5,300	5,460	4,770	4,560	5,260	5,280
27	.....	.....	16,100	7,320	5,360	4,550	5,410	5,410	4,710	4,570	4,250	5,360
28	.....	.....	14,300	6,810	5,380	4,800	5,360	5,360	5,340	4,590	4,330	5,210
29	.....	.....	12,700	6,380	5,360	4,830	5,360	5,440	5,330	4,200	4,420	6,080
30	.....	.....	11,000	6,050	5,680	5,140	5,360	5,460	4,870	4,570	4,510	5,700
31	.....	.....	11,400	.....	5,460	.....	5,380	5,360	.....	4,590	.....	5,500

NOTE—No discharge given for January 1 March 15, 1904, because of ice.

MONTHLY DISCHARGE OF DESPLAINES RIVER, ABOVE MOUTH OF JACKSON CREEK, NEAR CHANNAHON, ILLINOIS FOR 1903-04

[Drainage area, 996 square miles]

Month	Discharge in second-feet				Runoff—depth in inches on drainage area
	Maximum	Minimum	Mean	Per square mile	
1903					
March (16-31)	9,990	6,180	7,560	7.59	4.52
April	10,800	5,090	6,840	6.87	7.66
May	5,560	5,030	5,240	5.26	6.06
June	5,880	5,190	5,420	5.44	6.07
July	6,300	5,230	5,460	5.48	6.32
August	5,820	4,990	5,340	5.36	6.18
September	8,160	5,180	6,000	6.02	6.72
October	5,880	5,320	5,560	5.58	6.43
November	6,420	4,200	5,480	5.50	6.14
December	8,430	4,750	6,430	6.46	7.45
1904					
March (16-31)	19,000	7,890	13,200	13.25	7.89
April	12,800	5,720	7,560	7.59	8.47
May	5,900	5,090	5,600	5.62	6.48
June	5,580	4,470	4,920	4.94	5.51
July	5,410	4,960	5,210	5.23	6.03
August	5,490	4,530	5,240	5.26	6.06
September	5,500	4,540	5,000	5.02	5.60
October	5,390	4,200	4,740	4.76	5.49
November	5 560	4,250	5,100	5.12	5.71
December	6,080	4,480	5,440	5.46	6.30

NOTE—No estimates have been published for 1905 and 1906, as no discharge measurements were made. So far as known, the 1904 rating table is applicable for these two years, but as the information is very meager, there is a large element of uncertainty. These values differ from those previously published in United States Geological Survey Papers Nos. 128, 171 and 207, because of expressing values to nearest three significant figures only.

DESPLAINES RIVER NEAR CHANNAHON, ILLINOIS

(Above mouth of Kankakee River)

Location.—Just above mouth of Kankakee cut-off, and two miles below the mouth of Dupage River, near Channahon, Ill.

Records available.—January 1 to 14, and March 15 to December 20, 1903.

Drainage area.—One thousand three hundred and fifty-six square miles.

Gage.—Vertical staff gage graduated in feet and tenths below Chicago datum. In three sections, one section nailed to tree 100 feet

west of section on north side of river; one section nailed to a post at section on south side of river; and the second section nailed to a tree 150 feet west of section on south side of river.

Channel.—Gravel and salt; probably somewhat shifting.

Discharge measurements.—Made from boat and cable.

Winter flow.—Relation between gage height and discharge may be affected by ice during December, January, February, and March.

Regulation.—The flow includes that of the Chicago Drainage Canal.

DISCHARGE MEASUREMENTS OF DESPLAINES RIVER ABOVE MOUTH OF KANKAKEE RIVER NEAR CHANNAHON, ILLINOIS, IN 1903

Date	Hydrographer	Gage height †	Discharge
		Feet	*Second-feet*
March 14	E. H. Heilbron	83.59	8,649
April 9	E. H. Heilbron	86.61	5,483
April 26	E. H. Heilbron	86.10	6,139
May 9	E. H. Heilbron	86.93	5,078
July 11	E. H. Heilbron	86.75	5,713
August 30	E. H. Heilbron	86.75	5,753
September 26	E. H. Heilbron	86.55	5,621
October 28	F. W. Hanna	86.70	5,790
November 25	F. W. Hanna	86.95	5,138
December 17	E. H. Heilbron	85.60	*6,956

* Partly frozen.
† Below the Chicago datum.

DAILY GAGE HEIGHT, IN FEET, OF DESPLAINES RIVER ABOVE MOUTH OF KANKAKEE RIVER NEAR CHANNAHON, ILLINOIS, FOR 1903

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	80.20	.....	.....	86.12	86.95	86.65	87.05	86.79	86.84	86.84	86.75	86.45
2	85.20	.....	.....	86.30	86.95	86.73	86.84	86.88	86.78	86.78	86.56	86.50
3	85.18	.....	.....	86.35	86.80	86.78	86.82	86.86	86.86	86.88	86.81	86.40
4	85.18	.....	.....	86.53	86.95	86.70	86.98	86.66	86.76	86.67	86.95	86.38
5	85.15	.....	.....	86.35	86.95	86.48	87.01	86.68	86.83	86.56	86.97	87.05
6	85.15	.....	.....	86.02	86.95	86.40	86.98	86.97	87.25	86.73	86.88	87.12
7	.....	.....	.....	86.05	87.08	86.56	86.95	86.97	87.04	86.55	86.92	87.12
8	.....	.....	.....	86.33	86.97	86.51	86.95	87.07	87.00	86.57	87.00	87.12
9	.....	.....	.....	86.62	87.02	86.77	87.04	87.04	87.02	86.29	86.86	87.12
10	80.65	.....	.....	86.46	86.99	86.68	86.88	86.73	86.60	86.35	86.88	87.18
11	81.30	.....	.....	84.50	86.88	86.68	86.77	86.90	86.08	86.44	86.93	87.11
12	81.80	.....	.....	83.20	86.89	86.82	86.89	86.84	86.68	86.47	86.84	87.09
13	82.25	.....	.....	82.80	86.80	86.85	86.87	86.93	86.76	86.66	86.83	87.12
14	82.72	.....	.....	81.20	87.01	86.87	86.83	86.94	86.61	86.77	86.98	87.12
15	.....	.....	83.70	80.38	87.01	86.80	86.72	86.97	84.31	86.57	.....	87.12
16	.....	.....	84.14	80.90	87.08	86.84	86.85	87.08	84.06	86.69	86.95	87.12
17	.....	.....	84.58	81.41	87.25	86.96	86.87	87.16	84.86	86.74	86.93	87.18
18	.....	.....	84.90	82.15	87.14	86.93	86.01	87.25	84.84	86.64	87.09	87.11
19	.....	.....	84.92	83.20	87.10	86.81	86.35	87.13	85.14	86.78	87.05	87.09
20	.....	.....	84.16	83.72	87.06	86.91	86.65	86.99	85.38	86.69	86.91	87.15
21	.....	.....	82.85	84.50	87.05	86.92	86.71	87.03	85.66	86.71	87.00	.....
22	.....	.....	82.75	85.00	86.83	86.92	86.64	87.16	85.95	86.66	86.03	.....
23	.....	.....	83.21	85.45	86.88	86.94	86.71	87.13	86.11	86.75	86.08	.....
24	.....	.....	84.05	85.90	86.77	86.90	86.87	86.89	86.40	86.81	85.97	.....
25	.....	.....	84.38	85.70	86.94	87.06	86.85	87.01	86.66	86.85	86.83	.....
26	.....	.....	84.98	86.10	86.93	86.93	86.90	87.03	86.60	86.75	86.56	.....
27	.....	.....	85.20	86.17	86.88	87.00	86.81	86.80	86.67	86.79	86.90	87.10
28	.....	.....	85.50	86.27	86.81	86.98	86.80	86.24	86.70	86.80	86.75	.....
29	.....	.....	85.75	86.70	86.74	86.98	86.79	86.58	86.75	86.86	86.80	.....
30	.....	.....	85.89	86.82	86.71	87.03	86.80	86.82	86.92	86.87	86.55	.....
31	.....	.....	85.98	.....	86.79	.....	86.80	86.84	.....	86.79	.....	.....

NOTE—Gage readings are elevations below the Chicago datum. A decrease in gage reading indicates an increase in stage.

FOX RIVER DRAINAGE BASIN

GENERAL FEATURES

Fox River rises in Waukesha County, Wisconsin, flows south, and then southwest, into Illinois in Lake County, and enters the Illinois River at Ottawa, 35 miles below the mouth of the Kankakee. Its basin is about 130 miles long and averages 20 miles wide. The total length of the river, by map measurement, is 172 miles; the total drainage area is 2,590 square miles, of which 900 square miles are in Wisconsin and 1,690 square miles in Illinois.

The principal tributaries are White River in Wisconsin; Rock, Nippersink, Somonauk, and Big Indian creeks in Illinois; these are necessarily small from the shape of the basin. There are several lakes in the upper portion of the basin, the chief of which are Fox Lake and Geneva Lake. These lakes tend to regulate the flow to some extent.

The basin is chiefly undulating prairie. The valley is a quarter of a mile to a mile wide, with sloping bluffs; toward the sources the valley is less deep than below. The entire basin is covered with glacial drift containing much limestone. Elevations above sea level along the stream are as follows: Pewaukee Lake, 848 feet; Waukesha, Wis., 794 feet; mouth, 460 feet.

According to L. S. Smith, of Madison, Wis., about 30 per cent of the basin in Wisconsin is forested. There are practically no forested areas in Illinois. The mean annual rainfall varies from 30 inches in the northern part to 34 inches in the southern part. The mean temperature is about 47°. The winters in Wisconsin are severe, snowfall is heavy, and ice forms a foot or more in thickness on the streams. In Illinois, the winters are somewhat milder.

There are a number of suitable reservoir sites in the basin at which storage might be developed, but the value of the land which would be flooded would probably prohibit their construction.

The river has an average fall per mile of 1.4 feet in Wisconsin, and about 3 feet in Illinois. In the 6 miles above the mouth at Ottawa the fall is 5 feet per mile. There is therefore a considerable amount of water power available, much of which is used.

FOX RIVER AT SHERIDAN, ILLINOIS

Location.—At Glen Park Highway bridge at Sheridan, Ill., about one mile below the mouth of Somonauk Creek.

Records available.—September 20, 1905, to July 20, 1906.

Drainage area.—Two thousand one hundred and ninety square miles.

Gage.—Standard chain gage fastened to guard rail on downstream side of bridge.

Channel.—Clean; permanent.

Discharge measurements.—Made from upstream side of 2-span bridge and trestle approaches.

Winter flow.—River freezes over for considerable periods during December, January, February, and March, and the relation between gage height and discharge is thereby changed.

Regulation.—Probably none.

DISCHARGE MEASUREMENTS OF FOX RIVER AT SHERIDAN, ILLINOIS, IN 1905-06

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1905		*Feet*	*Sq.-ft.*	*Feet*	*Sec.-ft.*
September 19	Hanna and Brennan	199	1,020	4.05	1,100
October 31	M. S. Brennan	199	1,000	4.12	1,080
1906					
March 11	M. S. Brennan	196	1,340	5.70	3,330
March 29	A. H. Horton	204	1,340	5.70	3,320
March 30	A. H. Horton	204	1,320	5.60	3,180
May 21	A. H. Horton	199	916	3.58	596
May 21	A. H. Horton	199	916	3.58	596
June 20	M. S. Brennan	198	814	3.20	387

DAILY GAGE HEIGHT, IN FEET, OF FOX RIVER AT SHERIDAN, ILLINOIS, 1905-06

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1905												
1										3.65	4.0	3.95
2										3.55	3.9	3.9
3										3.6	3.85	
4										3.55	3.85	
5										3.55	3.9	
6										3.45	3.85	4.1
7										3.45	4.1	
8										3.4	4.05	
9										3.3	4.0	
10										3.5	3.95	
11										3.6	3.9	
12										3.5	3.9	
13										3.45	3.75	3.5
14										3.45	4.0	
15										3.4	3.95	
16										3.4	3.95	
17										3.5	3.85	
18										3.75	3.9	
19										4.1	3.9	
20									4.05	4.35	3.8	3.65
21									3.95	4.25	3.95	
22									3.9	4.25	3.9	
23									3.95	4.3	3.9	
24									3.85	4.25		
25									3.75	4.45	3.8	
26									3.7	4.4	3.65	
27									3.8	4.35	3.45	3.7
28									3.75	4.3	4.05	
29									3.7	4.2	4.2	
30									3.7	4.05	4.15	
31										4.15		
1906												
1			6.3	5.5	4.25	3.75	3.65					
2			6.65	5.4	4.6	3.6	3.3					
3			8.2	5.3	4.65	3.45	3.4					
4			7.35	5.25	4.35	3.3	3.4					
5			6.7	5.1	4.25	3.5	3.1					
6			6.7	5.3	4.15	3.55	3.15					
7			6.5	5.2	4.0	3.45	3.2					
8			6.45	5.15	4.2	3.35	3.05					
9			6.35	5.9	4.15	3.3	3.0					
10			6.25	6.35	4.1	3.4	3.25					
11			6.1	6.0	4.05	3.15	3.05					
12			5.9	5.75	4.0	3.2	3.0					
13			5.35	5.65	3.95	3.35	3.15					
14			5.1	5.5	3.75	3.4	3.05					
15			5.1	5.5	3.95	3.35	3.0					

DAILY GAGE HEIGHT, IN FEET, OF FOX RIVER AT SHERIDAN, ILLINOIS—*Concluded*

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1906												
16	.....	.....	4.9	5.45	3.85	3.4	2.95	.....	.....	.....	.....	.....
17	.....	.....	5.1	5.35	3.95	3.25	2.95	.....	.....	.....	.....	.....
18	.....	.....	5.2	5.3	3.85	3.0	3.0	.....	.....	.....	.....	.....
19	.....	.....	5.1	5.2	3.8	3.2	3.05	.....	.....	.....	.....	.....
20	.....	.....	4.95	5.1	3.75	3.25	3.05	.....	.....	.....	.....	.....
21	.....	.....	4.85	5.0	3.65	3.15	.....	.....	.....	.....	.....	.....
22	.....	6.8	4.5	4.85	3.85	3.05	.....	.....	.....	.....	.....	.....
23	.....	6.15	4.45	4.75	3.8	3.1	.....	.....	.....	.....	.....	.....
24	.....	6.7	4.25	4.75	4.0	3.05	.....	.....	.....	.....	.....	.....
25	.....	9.05	4.70	4.6	4.15	3.0	.....	.....	.....	.....	.....	.....
26	.....	7.6	4.85	4.55	4.0	3.0	.....	.....	.....	.....	.....	.....
27	.....	6.5	7.40	4.45	3.9	3.0	.....	.....	.....	.....	.....	.....
28	.....	6.5	6.9	4.4	3.8	3.25	.....	.....	.....	.....	.....	.....
29	.....	.....	5.9	4.3	4.0	3.1	.....	.....	.....	.....	.....	.....
30	.....	.....	5.6	4.2	3.95	3.65	.....	.....	.....	.....	.....	.....
31	.....	.....	5.65	.....	3.70	.....	.....	.....	.....	.....	.....	.....

NOTE—River frozen over December 3-31, 1905. Gage heights are to water surface in a hole in the ice.

RATING TABLE FOR FOX RIVER AT SHERIDAN, ILLINOIS, FOR 1905-06

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
2.90	220	4.50	1,570	6.10	4,000	7.70	7,000
3.00	260	4.60	1,700	6.20	4,170	7.80	7,200
3.10	310	4.70	1,830	6.30	4,340	7.90	7,400
3.20	360	4.80	1,970	6.40	4,520	8.00	7,600
3.30	420	4.90	2,110	6.50	4,700	8.10	7,810
3.40	480	5.00	2,260	6.60	4,880	8.20	8,020
3.50	550	5.10	2,410	6.70	5,060	8.30	8,230
3.60	630	5.20	2,560	6.80	5,250	8.40	8,440
3.70	710	5.30	2,710	6.90	5,440	8.50	8,650
3.80	800	5.40	2,860	7.00	5,630	8.60	8,860
3.90	900	5.50	3,020	7.10	5,820	8.70	9,070
4.00	1,000	5.60	3,180	7.20	6,010	8.80	9,280
4.10	1,100	5.70	3,340	7.30	6,200	8.90	9,590
4.20	1,210	5.80	3,500	7.40	6,400	9.00	9,700
4.30	1,330	5.90	3,660	7.50	6,600		
4.40	1,450	6.00	3,830	7.60	6,800		

NOTE—The above table is not applicable for ice or obstructed channel conditions. It is based on 8 discharge measurements made during 1905-06 and is well defined between gage heights 3.2 feet and 5.7 feet.

DAILY DISCHARGE IN SECOND-FEET OF FOX RIVER AT SHERIDAN, ILLINOIS, FOR 1905-06

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1905												
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	670	1,000	950
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	590	900	900
3	.....	.....	.....	.....	.....	.....	.....	.....	.....	630	850	.....
4	.....	.....	.....	.....	.....	.....	.....	.....	.....	590	850	.....
5	.....	.....	.....	.....	.....	.....	.....	.....	.....	590	900	.....
6	.....	.....	.....	.....	.....	.....	.....	.....	.....	515	850	.....
7	.....	.....	.....	.....	.....	.....	.....	.....	.....	515	1,100	.....
8	.....	.....	.....	.....	.....	.....	.....	.....	.....	480	1,050	.....
9	.....	.....	.....	.....	.....	.....	.....	.....	.....	420	1,000	.....
10	.....	.....	.....	.....	.....	.....	.....	.....	.....	550	950	.....
11	.....	.....	.....	.....	.....	.....	.....	.....	.....	630	900	.....
12	.....	.....	.....	.....	.....	.....	.....	.....	.....	550	900	.....
13	.....	.....	.....	.....	.....	.....	.....	.....	.....	515	755	.....
14	.....	.....	.....	.....	.....	.....	.....	.....	.....	515	1,000	.....
15	.....	.....	.....	.....	.....	.....	.....	.....	.....	480	950	.....
16	.....	.....	.....	.....	.....	.....	.....	.....	.....	480	950	.....
17	.....	.....	.....	.....	.....	.....	.....	.....	.....	550	850	.....

DAILY DISCHARGE IN SECOND-FEET OF FOX RIVER AT SHERIDAN, ILLINOIS, FOR 1905-06—*Concluded*

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1905												
18										755	900	
19										1,100	900	
20									1,050	1,390	800	
21									950	1,270	950	
22									900	1,270	900	
23									950	1,330	900	
24									850	1,270	850	
25									755	1,510	800	
26									710	1,450	670	
27									800	1,390	515	
28									755	1,330	1,050	
29									710	1,210	1,210	
30									710	1,050	1,150	
31										1,150		
1906												
1			4,340	3,020	1,270	755	670					
2			4,970	2,860	1,700	630	420					
3			8,020	2,710	1,760	515	480					
4			6,300	2,630	1,390	420	480					
5			5,060	2,410	1,270	550	310					
6			5,060	2,710	1,150	590	335					
7			4,700	2,500	1,000	515	360					
8			4,610	2,480	1,210	450	295					
9			4,430	3,660	1,150	420	260					
10			4,250	4,430	1,100	480	390					
11			4,000	3,830	1,050	335	285					
12			3,500	3,420	1,000	360	260					
13			2,780	3,260	950	450	335					
14			2,410	3,020	755	480	285					
15			2,410	3,020	950	450	260					
16			2,110	2,940	850	480	240					
17			2,410	2,780	850	390	240					
18			2,560	2,710	850	260	260					
19			2,410	2,560	800	360	285					
20			2,180	2,410	755	390	285					
21			2,040	2,260	670	335						
22		5,260	1,570	2,040	850	295						
23		4,080	1,510	1,900	800	310						
24		5,060	1,270	1,900	1,000	285						
25		9,780	1,830	1,700	1,150	260						
26		6,800	2,040	1,630	1,000	260						
27		4,700	6,400	1,510	900	260						
28		4,700	5,440	1,150	800	390						
29			3,660	1,330	1,000	310						
30			3,180	1,210	950	670						
31			3,260		710							

NOTE—Discharge interpolated November 24, 1905. River frozen December 3-31, 1905

MONTHLY DISCHARGE OF FOX RIVER AT SHERIDAN, ILLINOIS, FOR 1905-06

[Drainage area, 2190 square miles.]

Month	Discharge in second-feet				Runoff—depth in inches on drainage area
	Maximum	Minimum	Mean	Per square mile	
1905					
September (20-30)	1,050	710	831	0.379	0.16
October	1,510	420	863	.394	.45
November	1,210	515	912	.416	.46
1906					
February (22-28)	9,780	4,060	5,770	2.63	.68
March	8,020	1,270	3,570	1.63	1.88
April	4,430	1,210	2,540	1.16	1.29
May	1,760	670	1,020	.466	.54
June	755	260	422	.193	.22
July (1-20)	670	240	336	.153	.11

FOX RIVER AT OTTAWA, ILLINOIS

Location.—At highway bridge at Main Street, Ottawa, Ill., about one mile above the mouth.

Records available.—March 11 to April 11, 1903.

Drainage area.—Two thousand five hundred and eighty square miles.

Gage.—Vertical staff gage fastened to bridge abutment, and graduated to feet and tenths below the Chicago datum. The Chicago datum is 580.2 feet above sea level.

Channel.—Probably permanent.

Accuracy.—Subject to backwater from the Illinois River.

DISCHARGE MEASUREMENTS OF FOX RIVER AT OTTAWA, ILLINOIS, IN 1903

Date		Hydrographer	Gage height	Discharge
			Feet	*Second-ft.*
March	17	E. H. Heilbron	122.85	3,519
April	5	E. H. Heilbron	125.65	3,488

DAILY GAGE HEIGHT, IN FEET, OF FOX RIVER AT OTTAWA, ILLINOIS, FOR 1903

Day	Mar.	April	Day	March	April	Day	March	April	Day	March	April
1	.....	*	9	.....	125.82	17	122.95	.....	25	123.75	.....
2	.....	*	10	.....	126.25	18	123.25	.....	26	124.28	.....
3	.....	126.00	11	119.50	124.10	19	123.50	.....	27	124.60	.....
4	.....	126.01	12	120.50	.....	20	121.45	.....	28	124.88	.....
5	.....	125.62	13	120.90	.....	21	120.68	.....	29	125.25	.....
6	.....	125.10	14	121.40	.....	22	121.62	.....	30	125.95	.....
7	.....	124.92	15	121.92	.....	23	122.25	.....	31	126.35	.....
8	.....	125.35	16	122.50	.....	24	122.03	.....			

* Gage out of order.

SANGAMON RIVER DRAINAGE BASIN

GENERAL FEATURES

The drainage basin of Sangamon River lies wholly within the State of Illinois, very nearly in the center of the State. The river rises in the southwestern part of Ford County, flows southwestward to Decatur, in Macon County, thence westward to a point near Springfield, northwestward to its junction with Salt Creek at the northern boundary line of Menard County, and westward to its junction with Illinois River at the northern boundary of Cass County. Springfield is about twenty miles southwest of the center of the basin, which is roughly a right triangle in shape, with the mouth of the river opposite the vertical. The river is about 180 miles long, not including bends. The total drainage area is 5,410 square miles. The principal tributaries are Salt Creek and South Fork.

The eastern third of the drainage basin is somewhat undulating and elevated, the rest of the basin is a level prairie. The soil is a very fertile, rich, black loam, especially adapted for raising corn. There are coal mines in the vicinity of Springfield. The bed and banks of the river are soft and insecure. The slope of the river is small. The elevation of its source is about 700 feet above sea level, and that of its mouth is about 430 feet. The only timber in this drainage basin is in small groves or along the river banks.

The annual rainfall is about 37 inches. The winters are mild. Ice forms to some extent, and during severe winters attains considerable thickness.

The basin contains many swamp areas and is so level and low that little ground storage is available. High water follows every heavy rain, floods are of frequent occurrence and considerable duration, and as the banks of the river are low large areas are flooded. The drainage of the swamps and the opening up of channels so that flood waters may have an opportunity of returning quickly to the main stream makes the study of flood control and drainage of considerable importance. In some places short sections of the main stream are being straightened in an effort to provide a better channel so that floods will quickly drain off the adjacent land. Such work is of doubtful value, for in a few years at the most the river will return to its former channel or make new channels in order to keep in equilibrium. Any improvement of this kind should take into account the stream as a whole and should be begun at the lower end.

On account of the low slope, floods, low water, and lack of suitable foundations for dams, opportunities for development of water power are lacking.

SANGAMON RIVER AT MONTICELLO, ILLINOIS

Location.—At Illinois Central Railroad bridge about one-half mile west of Monticello, Ill.

Records available.—February 4, 1908, to December 31, 1911.

Drainage area.—Five hundred and fifty square miles.

Gage.—Standard chain gage attached to bridge; datum has remained unchanged since date of establishment.

Channel.—Section is at a pool; measurements to date indicate that control is permanent.

Discharge measurements.—Made from downstream side of bridge and wooden trestle approach.

Floods.—The flood of May, 1908, reached a height of 15.2 feet on the gage.

Winter flow.—Ice affects the relation between gage height and discharge during December, January, and February.

DISCHARGE MEASUREMENTS OF SANGAMON RIVER AT MONTICELLO, ILLINOIS, IN 1908–11

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1908		*Feet*	*Square feet*	*Feet*	*Second-feet*
April 9	R. J. Taylor	154	1,110	9.25	1,410
May 12	R. J. Taylor	366	2,860	13.65	6,830
July 26	R. J. Taylor	101	130	2.65	61
December 15	R. J. Taylor	67	64	2.05	13
1909					
March 20	W. M. O'Neill	137	417	4.83	281
March 24	W. M. O'Neill	125	351	4.35	222
May 20	H. J. Jackson	138	463	5.13	352
December 7	H. J. Jackson	116	181	3.07	79
1910					
March 11	M. E. McChristie	140	491	5.38	389
March 11	M. E. McChristie	140	489	5.38	391
May 14	H. J. Jackson	161	1,010	8.86	1,200
May 27	H. J. Jackson	152	773	7.46	767
May 28	H. J. Jackson	144	670	6.74	634
December 28	P. S. Monk	147	659	6.92	*518
1911					
October 11	Monk & Brown	136	441	5.22	356

* Ice present.

DAILY GAGE HEIGHT, IN FEET, OF SANGAMON RIVER AT MONTICELLO, ILLINOIS, FOR 1908–11

[Martin Doyle, observer.]

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1	.....	.....	9.9	6.6	10.0	7.3	3.1	2.2	2.0	1.9	2.0	2.2
2	.....	.....	10.0	6.7	9.1	6.8	3.7	2.2	1.9	1.9	2.0	2.2
3	.....	.....	10.5	6.5	8.5	6.4	3.3	2.2	1.9	1.9	2.0	2.2
4	.....	4.2	10.7	6.3	9.6	6.2	3.2	2.1	1.9	1.9	2.0	2.2
5	.....	6.1	10.7	6.2	11.3	6.0	3.1	2.1	1.9	1.8	2.0	2.2
6	.....	8.6	10.7	6.2	11.5	5.6	3.0	2.1	1.8	1.8	2.0	.....
7	.....	9.0	10.7	6.1	12.5	5.4	3.0	2.1	1.8	1.8	2.0	2.1
8	.....	8.3	10.8	6.8	13.5	5.1	2.9	2.1	1.8	1.8	2.0	2.1
9	.....	7.7	10.7	9.1	13.1	5.0	2.9	2.0	1.8	1.8	2.0	2.1
10	.....	6.9	10.2	9.4	12.8	4.9	2.9	2.0	1.8	1.8	2.0	2.0
11	.....	6.3	9.6	8.8	11.8	4.7	2.8	2.0	1.8	1.8	2.0	2.0
12	.....	7.3	9.2	8.2	13.6	4.5	2.8	2.0	1.8	1.8	2.0	2.0
13	.....	8.6	8.8	7.4	14.6	4.3	2.7	2.1	1.8	1.8	2.0	.....
14	.....	10.2	8.4	7.2	15.2	4.4	2.9	2.3	1.8	1.8	2.0	2.0
15	.....	11.2	8.0	6.9	14.0	4.4	3.1	2.2	1.8	1.8	2.0	2.0
16	.....	11.4	7.4	6.9	12.6	4.2	2.9	2.2	1.8	1.8	2.0	2.0
17	.....	12.0	7.1	7.0	11.7	4.0	2.8	2.2	1.8	1.8	2.0	2.0
18	.....	11.3	7.1	7.0	12.0	3.9	2.7	2.1	1.8	1.8	2.0	2.0
19	.....	10.2	8.0	6.8	11.6	3.8	2.6	2.0	1.8	1.8	2.0	2.0
20	.....	8.2	8.7	6.7	11.5	3.8	2.6	2.0	1.8	1.8	2.0	.....
21	.....	8.0	8.9	6.4	11.5	3.7	2.6	2.0	1.8	1.8	2.0	2.0
22	.....	7.7	8.5	6.0	11.6	3.5	2.6	2.0	1.8	1.9	2.0	2.0
23	.....	7.9	7.9	6.0	10.8	3.5	2.5	1.9	1.8	1.9	2.1	2.0
24	.....	7.4	7.3	8.0	10.1	3.4	2.5	1.9	1.8	1.9	2.1	2.0
25	.....	8.3	6.9	10.1	9.7	3.3	2.6	1.9	1.8	1.9	2.1	2.0
26	.....	10.1	6.6	10.5	9.2	3.2	2.6	1.9	1.8	1.9	2.2	2.0
27	.....	10.6	6.3	11.1	8.7	3.1	2.5	1.9	1.8	1.9	2.2	.....
28	.....	10.5	6.3	11.0	8.2	3.1	2.5	1.9	1.9	2.0	2.1	2.0
29	.....	10.5	6.9	10.8	8.1	3.2	2.4	1.9	1.9	2.0	.....	2.0
30	.....	.....	6.4	10.7	8.0	3.2	2.3	1.9	1.9	2.0	2.3	2.3
31	.....	.....	6.6	.....	7.8	.....	2.3	1.9	.....	2.0	.....	2.4
1909												
1	2.4	2.5	8.6	4.25	9.25	6.55	3.85	.....	2.2	2.0	2.35	3.25
2	2.3	2.4	8.1	4.15	.....	6.4	3.6	3.1	2.1	2.0	3.4	3.2
3	.....	2.4	7.7	4.2	8.55	6.85	3.5	3.0	2.2	.....	2.35	3.15
4	2.3	2.4	7.1	.....	7.6	7.4	.....	2.95	2.2	2.0	2.35	3.1
5	2.3	2.6	6.7	4.1	7.0	7.3	3.55	2.95	.....	2.0	2.35	.....
6	2.0	2.7	6.4	4.3	6.6	.....	3.8	2.9	2.1	2.0	2.3	3.5
7	2.0	.....	.....	8.4	6.05	5.8	7.8	2.8	2.1	2.0	.....	3.5
8	2.0	3.2	5.8	9.8	6.1	5.35	8.5	.....	2.1	1.95	2.35	.....
9	2.0	3.8	5.9	9.1	7.95	8.55	8.2	2.6	2.1	1.95	2.3	.....
10	.....	4.8	6.3	7.6	9.15	8.4	7.2	2.55	2.1	.....	2.3	.....
11	2.0	4.8	6.5	.....	9.35	7.15	9.2	2.5	2.1	2.0	2.3	2.8

DAILY GAGE HEIGHT, IN FEET, OF SANGAMON RIVER AT MONTICELLO, ILLINOIS—*Continued*

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
12	2.1	4.6	6.2	6.2	8.95	6.9	14.85	2.45	.....	2.0	2.7	.....
13	2.1	4.9	5.9	9.95	8.10	.....	13.15	2.4	2.05	2.0	2.9	3.7
14	2.1	.....	.....	10.9	7.5	9.7	10.95	2.4	2.0	.....	.....	4.3
15	2.1	7.2	5.4	10.9	6.9	7.9	9.1	.....	2.1	2.1	2.9	4.3
16	2.1	8.5	5.2	10.15	.....	6.3	7.8	2.4	1.95	2.0	4.4	4.35
17	.....	8.0	5.0	9.2	6.1	5.75	6.9	2.3	1.95	.....	5.0	4.4
18	2.1	7.8	4.7	.....	5.7	5.2	.....	2.3	1.95	2.3	4.5	4.25
19	2.0	8.0	4.9	8.55	5.4	4.9	5.7	2.25	.....	2.15	4.7	4.2
20	2.0	9.0	4.9	8.75	5.2	.....	5.2	2.2	2.0	2.2	4.25	3.9
21	2.1	.....	.....	9.8	5.05	4.4	5.0	2.2	2.0	2.25	.....	3.7
22	2.4	9.8	4.6	10.5	4.8	5.3	4.75	.....	2.4	2.3	3.7	3.6
23	2.5	10.1	4.5	10.4	.....	5.3	4.3	2.0	2.4	2.4	3.8	3.5
24	.....	10.85	4.3	10.0	4.45	4.8	4.15	2.1	2.25	.....	3.8	3.4
25	2.3	11.1	4.7	.....	4.9	4.5	.....	2.1	2.2	2.4	3.95	3.5
26	2.35	11.1	5.0	8.65	6.6	4.4	3.8	2.9	.....	2.35	3.85	3.2
27	2.3	10.3	5.2	8.0	8.2	.....	3.8	3.0	2.1	2.3	3.7	3.25
28	2.3	.....	.....	7.4	9.0	4.8	3.7	2.45	2.1	2.3	.....	3.25
29	2.6	.....	4.85	7.05	7.9	4.4	3.6	.....	2.1	2.3	3.4	3.1
30	2.5	.....	4.6	8.7	.....	4.1	3.45	2.2	2.0	2.25	3.3	3.1
31	.....	.....	4.4	.....	6.4	.....	3.35	2.2	.....	.....	.....	3.1
1910												
1	3.1	5.7	9.0	3.35	.....	6.3	4.05	.....	2.05	2.4	2.25	2.2
2	3.3	5.4	8.5	3.3	3.75	5.6	3.7	2.1	2.05	.....	2.25	2.2
3	3.35	5.9	7.4	.....	4.0	5.2	.....	2.05	2.0	2.35	2.25	2.2
4	3.35	6.1	6.6	3.35	4.2	4.9	3.3	2.0	.....	2.4	2.25	.....
5	3.35	6.2	6.5	3.35	4.0	.....	3.2	2.0	2.0	2.4	2.25	2.2
6	3.35	.....	.....	3.4	3.7	4.45	3.1	1.95	3.6	2.8	.....	2.2
7	3.35	5.15	6.9	3.3	3.85	4.25	3.0	.....	4.45	3.55	2.25	2.15
8	3.25	5.0	6.7	3.25	.....	4.0	2.85	1.95	6.0	3.4	2.25	2.15
9	.....	5.2	6.2	3.15	4.3	3.6	2.75	1.95	5.6	.....	2.25	2.15
10	3.1	4.8	5.75	.....	4.3	3.8	.....	1.9	4.3	3.0	2.2	2.15
11	3.1	4.6	5.4	3.1	4.3	3.65	2.6	1.9	.....	2.85	2.15	.....
12	3.15	4.1	5.2	3.1	4.4	.....	2.7	1.9	3.2	2.8	2.15	2.15
13	5.6	.....	.....	3.05	4.45	3.4	2.95	1.9	3.0	2.7	.....	2.05
14	8.35	4.25	4.8	3.0	4.3	3.3	3.6	.....	3.6	2.6	2.2	2.0
15	8.7	4.3	4.6	3.0	.....	3.2	3.3	1.85	3.2	2.55	2.2	2.05
16	.....	4.3	4.45	3.05	3.95	3.1	3.15	2.7	2.95	.....	2.2	2.0
17	7.7	3.6	4.3	.....	3.8	3.05	.....	2.8	2.75	2.55	2.2	2.0
18	9.5	4.3	4.25	3.2	3.7	3.0	2.8	3.4	.....	2.45	2.2	.....
19	9.7	4.9	4.15	3.2	3.6	.....	2.65	3.0	2.5	2.4	2.2	2.1
20	10.0	4.0	.....	3.15	3.65	2.8	2.5	2.5	2.5	2.4	.....	2.0
21	10.2	4.0	4.0	3.1	3.75	2.75	2.45	.....	2.4	2.4	2.2	2.0
22	10.2	4.0	3.95	3.1	.....	2.7	2.4	2.2	2.35	2.4	2.15	2.05
23	.....	3.9	3.85	3.1	7.2	2.6	2.35	2.2	.....	.....	2.15	2.1
24	9.65	3.8	3.8	.....	8.85	2.6	.....	2.3	2.4	2.3	2.15	2.0
25	8.7	3.6	3.7	3.1	9.45	2.5	2.2	2.15	.....	2.35	2.2	.....
26	7.7	3.95	3.7	3.2	9.15	.....	2.2	2.05	2.5	2.3	2.2	2.05
27	7.3	.....	.....	3.25	7.3	4.0	2.15	2.0	2.65	2.3	.....	2.05
28	7.2	9.45	3.7	3.4	6.8	6.45	2.15	.....	2.6	2.3	2.5	7.35
29	7.25	.....	3.6	3.75	.....	5.6	2.4	2.0	2.5	2.3	2.4	7.8
30	5.85	.....	3.6	3.7	6.4	4.6	2.3	2.0	2.5	.....	2.2	5.4
31	5.85	.....	.....	.....	6.7	.....	.....	2.0	.....	2.25	.....	5.1
1911												
1	.....	6.74	4.08	3.82	5.68	3.18	1.90	1.87	1.76	.....	4.38	6.21
2	3.75	6.00	4.00	.....	5.70	3.15	.....	1.78	1.70	8.83	4.22	6.10
3	3.7	5.45	3.95	3.68	5.55	2.90	1.90	1.77	.....	8.97	4.03	.....
4	3.45	5.18	3.85	4.15	5.23	.....	1.89	1.73	1.66	9.16	3.95	5.52
5	3.3	.....	.....	6.20	5.00	2.75	1.86	1.68	1.67	8.96	.....	5.30
6	3.05	4.65	3.65	7.90	4.72	2.68	1.81	.....	1.67	8.23	4.08	5.08
7	2.9	4.15	4.32	7.98	.....	2.68	1.78	1.69	1.78	7.43	4.15	5.00
8	.....	4.00	5.31	7.28	4.40	2.55	1.78	1.69	1.76	.....	4.25	4.92
9	2.7	4.00	6.60	.....	4.39	2.47	.....	1.68	2.14	6.07	4.37	4.86
10	2.6	3.55	7.20	5.85	4.25	2.40	2.30	1.68	.....	5.63	4.30	.....
11	2.7	3.31	6.55	5.45	4.80	.....	2.14	1.68	2.78	5.29	4.30	5.10
12	2.79	.....	.....	5.33	3.98	2.28	2.02	1.66	4.68	5.02	.....	5.34
13	3.25	3.84	5.64	5.38	3.81	2.24	1.96	.....	4.68	4.78	8.48	5.41
14	9.82	4.00	5.38	7.60	.....	2.20	1.84	1.61	3.73	4.58	8.88	5.32
15	.....	4.80	5.29	9.60	3.51	2.18	.....	1.60	3.37	.....	8.51	5.22
16	9.70	6.41	4.95	10.10	3.51	2.12	1.94	1.60	4.39	4.31	7.59	5.20
17	10.05	6.38	4.61	9.88	3.45	2.10	1.88	1.60	.....	4.48	8.34	.....
18	7.95	6.00	4.60	8.61	3.40	.....	1.84	1.60	4.73	4.81	9.95	4.82
19	7.20	.....	.....	7.80	3.35	2.01	1.79	1.58	4.23	4.61	10.15	4.68
20	6.75	6.40	4.21	7.30	3.30	2.08	1.79	.....	4.48	4.28	10.20	4.62
21	6.71	.....	4.00	7.30	.....	2.12	1.78	1.58	4.58	4.18	9.33	5.01
22	.....	4.95	4.00	7.30	3.41	2.08	.....	1.58	3.88	.....	8.60	6.50
23	4.88	4.75	3.98	.....	3.38	2.01	.....	1.71	3.40	5.89	8.05	7.90

DAILY GAGE HEIGHT, IN FEET, OF SANGAMON RIVER AT MONTICELLO, ILLINOIS—*Concluded*

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1911												
24	4.48	5.00	3.72	6.20	3.22	2.04	1.84	1.93	.....	6.75	7.50	.....
25	4.71	4.61	3.60	5.81	3.15	.....	1.78	1.87	5.47	6.12	7.02	8.29
26	6.69	4.40	.....	5.55	3.02	2.18	1.77	1.86	8.63	5.68	.....	7.56
27	8.07	4.40	3.85	5.32	2.99	2.29	1.77	.....	9.10	5.26	6.38	7.55
28	9.95	4.23	4.06	5.32	.....	2.18	1.71	2.21	9.46	4.94	6.30	7.38
29	9.88	.....	4.23	5.40	2.89	2.08	1.78	1.80	9.56	.....	6.35	7.00
30	9.32	.....	4.08	.....	2.88	1.90	.....	1.78	8.83	4.56	6.42	7.29
31	8.02	.....	4.00	.....	2.98	.....	1.76	1.76	.....	4.50	.....	.....

NOTE—Varying ice conditions existed from January 6–February 5, and December 7-31, 1909. Gage heights are to top of ice January 6, 7, and 30, and December 8–10, 18–31, 1909.

Ice present January 1–12, 1910, ranging from seven to nine inches. Also ice February 17–28, and December 1–28, 1910. Ice present January 1–29, 1911. Gage read to top of ice January 3–11, and January 18–24, 1911. Ice six to eight inches thick January 9, 1911. Ice blocked at gage January 14, 1911.

RATING TABLE FOR SANGAMON RIVER AT MONTICELLO, ILLINOIS, FROM FEBRUARY 4, 1908, TO DECEMBER 31, 1911

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.60	2	5.30	374	9.00	1,240	12.70	5,280
1.70	4	5.40	392	9.10	1,280	12.80	5,440
1.80	6	5.50	410	9.20	1,330	12.90	5,600
1.90	8	5.60	429	8.30	1,390	13.00	5,760
2.00	11	5.70	448	9.40	1,450	13.10	5,920
2.10	15	5.80	467	9.50	1,510	13.20	6,080
2.20	20	5.80	486	9.60	1,580	13.30	6,240
2.30	25	6.00	505	9.70	1,660	13.40	6,400
2.40	31	6.10	524	8.80	1,740	13.50	6,560
2.50	37	6.20	543	9.90	1,830	13.60	6,720
2.60	43	6.30	562	10.00	1,920	13.70	6,880
2.70	50	6.40	581	10.10	2,020	13.80	7,040
2.80	58	6.50	600	10.20	2,120	13.90	7,200
2.90	66	6.60	619	10.30	2,220	14.00	7,360
3.00	74	6.70	638	10.40	2,320	14.10	7,520
3.10	82	6.80	657	10.50	2,430	14.20	7,680
3.20	90	6.90	676	10.60	2,540	14.30	7,840
3.30	99	7.00	695	10.70	2,650	14.40	8,000
3.40	108	7.10	715	10.80	2,760	14.50	8,160
3.50	118	7.20	735	10.90	2,880	14.60	8,320
3.60	128	7.30	756	11.00	3,000	14.70	8,480
3.70	138	7.40	777	11.10	3,120	14.80	8,640
3.80	148	7.50	799	11.20	3,240	14.90	8,800
3.90	159	7.60	822	11.30	3,360	15.00	8,960
4.00	170	7.70	846	11.40	3,480	15.10	9,120
4.10	182	7.80	870	11.50	3,600	15.20	9,280
4.20	194	7.90	895	11.60	3,730	15.30	9,440
4.30	208	8.00	920	11.70	3,860	15.40	9,600
4.40	222	8.10	948	11.80	3,990	15.50	9,760
4.50	236	8.20	976	11.90	4,120	15.60	9,920
4.60	252	8.30	1,006	12.00	4,250	15.70	10,080
4.70	268	8.40	1,036	12.10	4,390	15.80	10,240
4.80	284	8.50	1,068	12.20	4,530	15.90	10,400
4.90	302	8.60	1,100	13.30	4,670	16.00	10,560
5.00	320	8.70	1,134	12.40	4,820		
5.10	338	8.80	1,168	12.50	4,970		
5.20	356	8.90	1,204	12.60	5,120		

NOTE—The above table is not applicable for ice or obstructed channel conditions. It is based on fourteen discharge measurements made during 1908-11, is well defined between gage heights 2.0 and 9.3 feet, and is fairly well defined between gage heights 9.3 feet and 14.0 feet. Above gage height 12.6 feet the rating curve is a tangent, the difference being 160 per tenth.

DAILY DISCHARGE, IN SECOND-FEET, OF SANGAMON RIVER AT MONTICELLO, ILLINOIS, FOR 1908-11

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1	.....	.....	1,830	619	1,920	756	82	20	11	8	11	20
2	.....	.....	1,920	638	1,280	657	138	20	8	8	11	20
3	.....	.....	2,430	600	1,070	581	99	20	8	8	11	20
4	.....	194	2,650	562	1,580	543	90	15	8	8	11	20
5	.....	524	2,650	543	3,360	505	82	15	8	6	11	20
6	.....	1,100	2,650	543	3,600	429	74	15	6	6	11	18
7	.....	1,240	2,650	524	4,970	392	74	15	6	6	11	15
8	.....	1,010	2,760	657	6,560	338	66	15	6	6	11	15
9	.....	846	2,650	1,280	5,920	320	66	11	6	6	11	15
10	.....	676	2,120	1,450	5,440	302	66	11	6	6	11	11
11	.....	562	1,580	1,170	3,990	268	58	11	6	6	11	11
12	.....	756	1,330	976	6,720	236	58	11	6	6	11	11
13	.....	1,100	1,170	777	8,320	208	50	15	6	6	11	11
14	.....	2,120	1,040	735	9,280	222	66	25	6	6	11	11
15	.....	3,240	920	676	7,360	222	82	20	6	6	11	11
16	.....	3,480	777	676	5,120	194	66	20	6	6	11	11
17	.....	4,250	715	695	3,860	170	58	20	6	6	11	11
18	.....	3,360	715	695	4,250	159	50	15	6	6	11	11
19	.....	2,120	920	657	3,730	148	43	11	6	6	11	11
20	.....	976	1,130	638	3,600	148	43	11	6	6	11	11
21	.....	920	1,200	581	3,600	138	43	11	6	6	11	11
22	.....	846	1,070	505	3,730	118	43	11	6	8	11	11
23	.....	895	895	505	2,760	118	37	8	6	8	15	11
24	.....	777	756	920	2,020	108	37	8	6	8	15	11
25	.....	1,010	676	2,020	1,660	99	43	8	6	8	15	11
26	.....	2,020	619	2,430	1,330	90	43	8	6	8	20	11
27	.....	2,540	562	3,120	1,130	82	37	8	6	8	20	11
28	.....	2,430	562	3,000	976	82	37	8	8	11	15	11
29	.....	2,430	676	2,760	948	90	31	8	8	11	20	11
30	.....	.....	581	2,650	920	90	25	8	8	11	25	25
31	.....	.....	619	.....	870	.....	25	8	.....	11	.....	31
1909												
1	31	20	1,100	201	1,360	610	154	93	20	11	28	94
2	25	31	948	188	1,220	581	128	82	15	11	108	90
3	25	31	846	194	1,080	666	118	74	20	11	28	86
4	25	31	715	188	822	777	120	70	20	11	28	82
5	25	43	638	182	695	756	123	70	18	11	28	100
6	8	50	581	208	619	612	148	66	15	11	25	118
7	6	70	524	1,040	514	467	870	58	15	11	26	118
8	6	90	467	1,740	524	383	1,070	50	15	10	28	80
9	6	148	486	1,280	907	1,080	976	43	15	10	25	50
10	6	284	562	822	1,300	1,040	735	40	15	10	25	40
11	6	284	600	682	1,420	725	1,330	37	15	11	25	50
12	8	252	543	543	1,220	676	8,720	34	14	11	50	100
13	8	302	486	1,880	948	1,170	6,000	31	13	11	66	138
14	8	518	430	2,880	799	1,600	2,940	31	11	13	66	208
15	8	735	392	2,880	676	895	1,280	31	15	15	66	208
16	10	1,070	356	2,070	600	562	870	31	10	11	222	215
17	10	920	320	1,330	524	458	676	25	10	18	320	222
18	10	870	268	1,200	448	356	562	25	10	25	236	180
19	11	920	302	1,080	392	302	448	22	10	18	268	150
20	11	1,240	302	1,150	356	262	356	20	11	20	201	130
21	15	1,490	277	1,740	329	222	320	20	11	22	170	120
22	31	1,740	252	2,430	284	374	276	16	31	25	138	100
23	37	2,020	236	2,320	256	374	208	11	31	31	148	80
24	30	2,820	208	1,920	229	284	188	15	22	31	148	70
25	23	3,120	268	1,520	302	236	168	15	20	31	164	60
26	28	3,120	320	1,120	619	222	148	66	18	28	153	50
27	25	2,220	356	920	976	253	148	74	15	25	138	50
28	25	1,660	325	777	1,240	284	138	34	15	25	123	40
29	20	.....	293	705	895	222	128	27	15	25	108	40
30	20	.....	252	1,130	738	182	113	20	11	22	99	30
31	15	.....	222	.....	581	.....	104	20	.....	25	.....	30
1910												
1	30	448	1,240	104	140	562	176	18	13	31	22	16
2	40	392	1,070	99	143	429	138	15	13	30	22	18
3	45	486	777	102	170	356	118	13	11	28	22	18
4	45	524	619	104	194	302	99	11	11	31	22	18
5	45	543	600	104	170	266	90	11	11	31	22	18
6	45	445	638	108	138	229	82	10	128	58	22	18
7	45	347	676	99	160	201	74	10	229	123	22	16
8	40	320	638	94	182	170	62	10	505	108	22	16
9	35	356	543	86	208	128	54	10	429	91	22	15
10	30	284	458	84	208	118	48	8	208	74	20	14
11	30	252	392	82	208	133	43	8	149	62	18	13
12	35	182	356	82	222	120	50	8	90	58	18	12
13	429	192	320	78	229	108	70	8	74	50	19	9

DAILY DISCHARGE, IN SECOND-FEET, OF SANGAMON RIVER AT MONTICELLO, ILLINOIS—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1910												
14	1,020	201	284	74	208	99	128	8	128	43	20	7
15	1,130	208	252	74	186	90	99	7	90	40	20	8
16	988	208	229	78	164	82	86	50	70	40	20	7
17	846	128	208	84	148	78	72	58	54	40	20	7
18	1,510	208	201	90	138	74	58	108	46	34	20	8
19	1,660	302	188	90	128	66	46	74	37	31	20	10
20	1,920	170	179	86	133	58	37	37	37	31	20	7
21	2,120	170	170	82	143	54	34	28	31	31	20	7
22	2,120	170	164	82	439	50	31	20	28	31	18	8
23	1,870	159	154	82	735	43	28	20	30	28	18	10
24	1,620	148	148	82	1,190	43	24	25	31	25	18	7
25	1,130	128	138	82	1,480	37	20	18	34	28	20	8
26	846	164	138	90	1,300	104	20	13	37	25	20	8
27	756	638	138	94	756	170	18	11	46	25	28	9
28	735	1,480	138	108	657	590	18	11	43	25	37	766
29	746	.....	128	143	629	429	31	11	37	25	31	870
30	476	.....	128	138	581	252	25	11	37	24	20	392
31	476	.....	121	.....	638	.....	22	11	.....	22	.....	338
1911												
1	.....	646	180	150	444	88	8	7.4	5.2	1,180	219	545
2	.....	505	170	143	448	86	8	5.6	4	1,180	197	524
3	.....	401	164	136	420	66	8	5.4	4	1,230	174	469
4	.....	352	154	188	361	60	7.8	4.6	3.2	1,310	164	414
5	.....	306	144	543	320	54	7.2	3.6	3.4	1,230	172	374
6	.....	260	133	695	271	49	6.2	3.7	3.4	985	180	334
7	.....	188	211	915	246	49	5.6	3.8	5.6	784	188	320
8	.....	170	376	752	222	40	5.6	3.8	5.2	651	201	306
9	.....	170	619	614	221	35	4	3.6	17	518	218	295
10	.....	123	735	476	201	31	25	3.6	40	435	208	316
11	.....	100	610	401	284	27	17	3.6	56	356	208	338
12	.....	126	524	379	168	24	12	3.2	265	324	634	381
13	.....	152	437	388	149	22	10	2.7	265	281	1,060	394
14	.....	170	388	822	134	20	6.8	2.2	141	249	1,200	378
15	.....	284	372	1,580	119	19	8	2	105	236	1,070	360
16	.....	563	311	2,020	119	16	9.2	2	221	222	820	356
17	.....	577	254	1,810	113	15	7.6	2	250	233	1,020	322
18	.....	505	252	1,100	108	13	6.8	2	273	286	1,880	288
19	.....	548	224	870	104	11	5.8	1.6	198	254	2,070	265
20	.....	581	195	756	99	14	5.8	1.6	233	205	2,120	255
21	.....	446	170	756	125	16	5.6	1.6	249	192	1,410	322
22	.....	311	170	756	109	14	6.0	1.6	157	338	1,100	600
23	.....	276	168	650	106	11	6.4	4.2	108	484	934	895
24	.....	320	40	543	92	13	6.8	8.9	100	648	799	948
25	.....	254	128	469	86	16	5.6	7.4	405	528	699	1,000
26	.....	222	150	420	76	19	5.4	7.2	1,110	444	638	812
27	.....	222	154	378	73	24	5.4	15	1,280	367	577	810
28	.....	198	176	378	66	19	4.2	20	1,490	309	562	773
29	.....	.....	198	392	65	14	5.6	6	1,550	278	572	695
30	1,390	.....	180	400	64	8	5.5	5.6	1,180	246	585	754
31	926	.....	170	.....	72	.....	5.2	5.2	.....	236	.....	658

NOTE—Discharges are interpolated for days of missing gage height. Discharge estimated because of ice January 6–18, January 21–February 1, December 8–12, and 18–31, 1909, and January 1–12, and December 1–27, 1910. Discharge may be somewhat large February 18–28, 1910, on account of ice. Mean discharge January 1–29, 1911, estimated because of ice about 508 second-feet varying from about 20 to 1,740 second-feet.

MONTHLY DISCHARGE OF SANGAMON RIVER AT MONTICELLO, ILLINOIS, FOR 1908–11

[Drainage area, 550 square miles]

Month	Discharge in second-feet				Runoff—depth in inches on drainage area	Accuracy
	Maximum	Minimum	Mean	Per square mile		
1908						
February (4–29)	4,250	194	1,890	3.44	3.33	B.
March	2,760	562	1,380	2.51	2.89	B.
April	3,120	505	1,120	2.04	2.28	B.
May	9,280	870	3,610	6.56	7.56	B.
June	756	82	260	.473	.53	A.

MONTHLY DISCHARGE OF SANGAMON RIVER AT MONTICELLO, ILLINOIS—*Concluded*

Month	Discharge in second-feet				Runoff—depth in inches on drainage area	Accuracy
	Maximum	Minimum	Mean	Per square mile		
1908						
July	138	25	58.5	.106	.12	A.
August	25	8	13.2	.024	.03	B.
September	11	6	6.63	.012	.01	C.
October	11	6	7.29	.013	.01	C.
November	25	11	12.9	.024	.03	B.
December	31	11	14.2	.026	.03	B.
1909						
January	37	.....	16.8	.031	.04	C.
February	3,120	.....	932	1.69	1.76	B.
March	1,100	208	448	.815	.94	A.
April	2,880	182	1,210	2.20	2.46	B.
May	1,420	229	738	1.34	1.54	A.
June	1,660	182	556	1.01	1.13	A.
July	8,720	104	954	1.73	1.99	B.
August	93	11	40.4	.074	.09	A.
September	31	10	15.9	.029	.03	B.
October	31	10	17.7	.032	.04	B.
November	320	25	109	.198	.22	A.
December	.....	.....	101	.184	.21	C.
The year	8,720	.....	428	.778	10.45	
1910						
January	2,120	.....	738	1.32	1.52	B.
February	1,480	128	330	.600	.62	B.
March	1,240	121	369	.671	.77	A.
April	143	74	92.8	.169	.19	A.
May	1,480	128	388	.705	.81	A.
June	590	37	182	.331	.37	A.
July	176	18	61.3	.112	.13	A.
August	108	7	21.3	.039	.04	A.
September	505	11	89.6	.163	.18	A.
October	123	22	42.7	.078	.09	A.
November	37	18	21.4	.039	.04	A.
December	870	7	86.5	.157	.18	C.
The year	2,120	7	202	.349	4.94	
1911						
January	.....	.....	550	1.00	1.15	B.
February	646	100	321	.584	.61	A.
March	735	128	266	.484	.56	A.
April	2,020	136	669	1.22	1.36	B.
May	448	64	177	.322	.37	A.
June	88	8	29.8	.054	.06	B.
July	25	4	7.62	.014	.02	C.
August	20	1.6	4.86	.0088	.01	C.
September	1,550	3.2	324	.589	.66	A.
October	1,310	192	523	.957	1.10	A.
November	2,120	164	729	1.33	1.48	B.
December	1,000	255	500	.909	1.05	A.
The year	2,120	1.6	341	.620	8.43	

SANGAMON RIVER AT DECATUR, ILLINOIS

Location.—At the "Cowford Bridge" on East Cantrall Street, Decatur, Ill., just below the Wabash Railroad bridge, and several miles above a small dam used for city water supply.

Records available.—April 29 to September 10, 1905.

Drainage area.—Seven hundred and ninety-one square miles.

Gage.—Standard chain gage fastened to bridge.

Channel.—Banks are low; bed is of clay and probably permanent.

Discharge measurements.—Made from downstream side of bridge at medium and high stages; low water measurements made by wading one-fourth mile below the bridge at the ford known as "Cowford."

Winter flow.—Ice may affect the relation of gage height to discharge at times during December, January, and February.

Regulation.—None.

DISCHARGE MEASUREMENTS OF SANGAMON RIVER AT DECATUR, ILLINOIS, IN 1905

Date	Hydrographer	Width	Area of section	Mean velocity	Gage height	Discharge
		Feet	*Square ft.*	*Ft. per sec.*	*Feet*	*Second-feet*
April 29	S. K. Clapp	128	973	0.81	10.12	788
May 18	S. K. Clapp	120	812	.68	8.82	555

DAILY GAGE HEIGHT, IN FEET, OF SANGAMON RIVER AT DECATUR, ILLINOIS, FOR 1905

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1					9.8	7.7	6.2	6.0	5.8			
2					9.2	7.5	6.3	6.1	5.9			
3					8.9	7.4	6.3	6.2	6.6			
4					8.5	7.2	6.8	6.1	6.2			
5					8.5	6.9	6.9	6.2	6.0			
6					9.0	6.8	8.1	6.1	5.9			
7					9.4	6.7	8.2	6.0	5.8			
8					9.2	6.8	8.3	6.0	5.8			
9					8.9	6.7	8.0	6.0	5.8			
10					8.7	6.5	8.9	5.9	5.9			
11					8.3	6.8	9.4	5.8				
12					8.2	7.3	9.8	6.0				
13					8.8	8.4	9.4	6.0				
14					9.8	8.7	9.5	6.0				
15					10.6	8.0	9.0	6.0				
16					10.7	7.8	8.4	6.0				
17					9.6	7.4	7.9	6.0				
18					8.8	7.2	7.5	5.9				
19					8.5	7.0	7.3	5.9				
20					8.2	6.7	7.0	5.8				
21					7.9	6.6	7.2	5.8				
22					7.7	6.7	6.8	5.9				
23					7.4	6.6	6.7	5.9				
24					7.4	6.5	6.5	6.0				
25					7.1	6.7	6.4	5.9				
26					7.2	6.6	6.3	5.8				
27					7.0	6.4	6.2	6.0				
28					7.0	6.5	6.4	5.9				
29				10.1	7.1	6.3	6.2	5.8				
30				10.0	7.6	6.3	6.3	5.9				
31					7.9		6.1	5.8				

SANGAMON RIVER AT RIVERTON, ILLINOIS

Location.—At Wabash Railroad bridge about one-quarter mile west of depot at Riverton, Ill., about two and one-half miles below the mouth of South Fork.

Records available.—February 13, 1908, to December 31, 1911.

Drainage area.—Two thousand five hundred and sixty square miles.

Gage.—Standard chain gage attached to bridge. Datum has remained unchanged since establishment.

Channel.—Slightly shifting; section is at a pool and measurements to date indicate that the point of control is not changing; broken by two bridge piers.

Discharge measurements.—Made from downstream side of 3-span bridge.

Floods.—The high water of 1883 reached a height of approximately 32 feet on the present gage. The high water of 1875 is said to have been ½ foot lower than this. The high water of October, 1911, reached a height of 27.1 feet.

Winter flow.—Ice may affect the relation between gage height and discharge during December, January, and February; this will only occur during short periods of extremely cold weather as warm water from factories seems to prevent the formation of ice.

DISCHARGE MEASUREMENTS OF SANGAMON RIVER AT RIVERTON, ILLINOIS, IN 1908–11

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1908		*Feet*	*Sq. ft.*	*Feet*	*Sec.-ft.*
February 13	R. J. Taylor	218	2,200	16.50	3,760
July 27	R. J. Taylor	151	733	8.4	326
1909					
February 7	R. J. Taylor	157	856	9.39	397
March 18	W. M. O'Neill	181	1,360	12.27	1,480
March 23	W. M. O'Neill	175	1,170	11.33	1,090
May 18	H. J. Jackson	197	1,760	14.56	2,440
November 26	H. J. Jackson	180	1,210	11.97	1,250
1910					
March 16	M. E. McChristie	179	1,190	11.88	1,220
May 16	H. J. Jackson	212	2,100	16.47	3,320
May 20	H. J. Jackson	184	1,320	12.83	1,510
May 31	H. J. Jackson	222	2,350	17.54	3,750
June 2	H. J. Jackson	200	1,790	15.02	2,520
December 23	P. S. Monk	146	534	8.18	228
December 24	P. S. Monk	140	476	7.82	167
1911					
March 20	P. S. Monk	180	1,110	11.80	1,180
October 5	Monk & Brown	441	5,520	25.36	15,400

DAILY GAGE HEIGHT, IN FEET, OF SANGAMON RIVER AT RIVERTON, ILLINOIS, FOR 1908–11

[B. H. Watson, observer]

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1	.....	.....	22.1	15.9	20.4	16.2	9.5	8.0	7.6	7.0	6.7	7.1
2	.....	.....	21.9	16.0	19.8	15.1	9.4	7.9	7.6	7.0	6.7	7.1
3	.....	.....	21.7	16.1	19.4	14.3	9.2	7.9	7.5	6.9	6.7	7.1
4	.....	.....	21.5	16.0	21.8	13.8	9.0	7.8	7.5	6.9	6.6	7.1
5	.....	.....	21.3	15.8	23.1	13.5	9.0	7.8	7.4	6.9	6.6	7.1
6	.....	.....	21.6	15.7	23.8	13.2	8.9	7.7	7.3	6.9	6.6	7.1
7	.....	.....	21.5	16.0	24.8	12.9	9.7	7.7	7.3	6.9	6.6	7.1
8	.....	.....	21.6	16.4	26.3	12.5	10.6	7.7	7.2	6.9	6.6	7.1
9	.....	.....	22.1	16.7	26.4	12.0	10.5	7.7	7.2	6.9	6.6	7.1
10	.....	.....	22.3	16.9	26.0	11.9	10.0	7.7	7.2	6.9	6.6	7.1
11	.....	.....	22.1	17.1	25.8	11.7	9.5	7.7	7.2	6.9	6.6	7.1
12	.....	.....	21.9	17.1	25.4	11.5	9.3	7.7	7.2	6.9	6.6	7.1
13	.....	16.5	21.7	17.0	24.8	11.4	9.1	7.7	7.2	6.9	6.6	7.1
14	.....	18.0	21.5	16.9	24.3	11.0	8.9	7.7	7.2	6.8	6.6	7.1
15	.....	19.9	21.0	16.4	23.3	10.8	8.7	7.7	7.2	6.8	6.6	7.1
16	.....	20.0	20.7	15.9	23.2	10.6	8.7	7.7	7.2	6.8	6.6	7.1
17	.....	20.9	19.5	15.1	23.4	10.4	8.6	7.7	7.1	6.8	6.7	7.1
18	.....	20.5	17.1	14.5	23.5	10.3	8.6	7.6	7.1	6.8	6.8	7.1
19	.....	20.0	16.5	14.0	23.1	10.2	8.5	7.6	7.0	6.8	6.8	7.1

DAILY GAGE HEIGHT, IN FEET, OF SANGAMON RIVER AT RIVERTON, ILLINOIS—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
20	.....	20.4	16.0	13.9	22.6	9.9	8.5	7.6	6.9	6.8	6.8	7.1
21	.....	20.5	15.5	13.4	22.1	9.8	8.5	7.6	6.9	6.7	6.8	7.1
22	.....	20.5	15.1	13.4	22.6	9.6	8.5	7.5	7.0	6.7	6.8	7.1
23	.....	20.1	14.9	13.9	22.4	9.5	8.5	7.4	7.0	6.7	6.9	7.1
24	.....	20.0	14.7	14.9	22.2	9.4	8.6	7.4	7.0	6.7	6.9	7.1
25	.....	20.6	14.4	16.0	22.0	9.3	8.6	7.3	7.0	6.7	7.0	7.1
26	.....	21.7	14.3	18.6	21.9	9.2	8.5	7.3	7.0	6.7	7.0	7.1
27	.....	22.1	14.6	19.7	21.4	9.1	8.5	7.2	7.0	6.7	7.1	7.1
28	.....	22.0.	15.0	21.1	20.5	9.0	8.4	7.2	7.0	6.7	7.1	7.1
29	.....	21.8	15.6	20.9	19.7	9.0	8.3	7.2	7.0	6.7	7.1	7.1
30	.....	.....	15.9	20.7	19.0	9.6	8.2	7.1	7.0	6.7	7.1	7.1
31	.....	.....	16.1	.....	17.9	.....	8.1	7.4	.....	6.7	.....	7.1
1909												
1	7.1	8.2	.....	11.0	16.5	20.0	10.7	10.5	7.8	8.0	8.4	10.9
2	7.1	8.4	.....	10.9	16.0	19.0	10.0	10.4	7.8	8.0	8.4	10.6
3	7.1	8.6	17.2	10.9	15.8	19.0	9.8	10.3	7.8	8.0	8.5	10.55
4	7.1	8.6	16.4	10.9	15.6	19.25	9.6	10.2	7.8	8.0	8.5	10.45
5	7.1	8.7	15.7	10.9	15.2	18.0	10.1	10.1	7.8	8.0	8.5	10.2
6	7.1	8.9	15.0	10.8	15.0	16.9	13.7	9.9	7.8	8.0	8.5	10.2
7	7.1	9.0	14.7	10.8	14.8	15.8	20.5	9.8	7.8	8.0	8.5	10.15
8	7.1	9.4	13.9	10.9	14.9	15.4	19.9	9.8	7.8	8.0	8.6	9.7
9	7.1	9.6	12.5	11.4	15.1	15.65	19.9	9.8	7.7	8.0	8.8	9.3
10	7.1	9.9	12.4	12.1	16.5	14.95	19.5	9.7	7.7	8.0	8.9	9.6
11	7.1	10.4	12.0	12.6	16.4	14.5	19.0	9.5	7.7	8.0	9.0	9.8
12	7.1	10.5	11.8	12.9	17.2	14.5	20.5	9.3	7.6	8.0	9.0	10.0
13	7.1	10.8	11.5	13.2	18.5	14.7	22.5	9.2	7.6	8.0	9.05	10.2
14	7.1	10.9	11.9	13.8	18.4	14.9	23.7	8.9	7.6	8.0	9.05	10.9
15	7.1	11.0	12.0	14.0	18.3	13.7	24.3	8.7	7.6	8.0	.....	11.8
16	7.1	11.2	12.1	14.4	18.0	13.1	24.0	8.7	7.9	8.0	.....	12.4
17	7.1	14.0	12.1	15.9	17.4	12.9	22.0	8.4	8.0	8.0	.....	13.0
18	7.1	15.1	11.9	16.9	16.7	12.7	21.0	8.3	8.0	8.0	.....	12.9
19	7.1	16.0	11.8	18.4	16.2	12.1	20.5	8.1	8.0	8.4	.....	12.4
20	7.2	17.0	11.6	19.5	15.4	11.8	19.4	8.1	8.2	8.5	11.8	12.0
21	7.3	18.0	11.6	20.8	14.4	11.6	18.0	8.0	8.2	8.5	.....	11.7
22	7.3	18.6	11.5	21.9	13.4	11.3	17.2	7.9	8.1	8.5	.....	11.7
23	7.3	19.4	11.5	22.6	12.6	11.2	16.5	7.8	8.1	8.4	.....	11.4
24	7.4	19.6	11.4	22.3	11.7	11.0	15.2	7.8	8.1	8.4	.....	11.15
25	7.5	.....	11.3	22.0	13.0	10.7	14.0	7.7	8.0	8.4	.....	10.9
26	7.5	.....	11.3	21.4	14.05	11.0	13.1	7.7	8.0	8.4	12.0	10.7
27	7.5	.....	11.2	20.5	15.6	11.6	12.7	7.7	8.0	8.4	11.9	10.5
28	7.5	.....	11.25	19.0	16.4	11.8	11.6	7.6	8.0	8.3	11.65	10.4
29	7.6	.....	11.1	18.1	17.5	11.6	11.2	7.6	8.0	8.3	11.4	10.2
30	7.6	.....	11.0	17.5	17.5	11.4	10.8	7.6	8.0	8.3	11.0	10.0
31	7.9	.....	11.0	.....	19.0	.....	10.6	7.6	.....	8.3	.....	10.0
1910												
1	10.0	13.8	17.4	10.0	10.6	16.55	12.7	9.2	8.55	8.75	8.1	12.25
2	10.0	13.3	18.1	9.95	10.45	15.1	11.9	8.8	8.2	8.7	8.05	12.25
3	10.1	13.0	18.5	9.0	10.8	14.2	11.1	8.6	7.8	8.45	8.1	12.25
4	10.5	12.9	19.0	9.0	14.6	13.5	10.7	8.4	7.85	8.6	7.95	12.0
5	10.5	12.85	19.3	10.2	15.15	12.9	11.6	8.25	7.8	8.6	7.95	11.15
6	10.25	12.8	19.0	10.4	14.6	12.7	12.2	8.1	7.75	8.85	8.0	9.85
7	10.2	12.7	18.1	10.6	13.95	12.5	11.5	8.0	8.0	9.7	7.95	9.55
8	10.2	12.6	17.1	10.4	13.9	12.1	11.6	7.9	8.5	9.9	8.0	8.65
9	10.3	12.4	16.0	10.2	14.5	11.7	10.9	8.0	11.15	10.4	8.0	8.9
10	10.5	12.1	15.1	10.0	14.55	12.0	10.1	7.9	11.4	10.55	7.95	8.75
11	10.4	12.0	14.2	9.9	14.5	13.1	9.7	7.8	11.75	10.25	7.95	8.55
12	10.1	11.8	13.6	9.8	16.75	11.6	9.6	7.75	11.7	9.9	7.95	8.45
13	10.8	11.7	13.0	9.7	18.0	11.0	10.2	7.7	11.2	9.45	7.95	8.35
14	14.5	11.2	12.6	9.6	17.8	10.65	10.4	7.65	10.35	9.2	8.0	8.4
15	15.9	11.1	12.2	9.6	17.0	10.5	11.0	7.55	9.5	8.95	7.95	8.25
16	16.2	11.2	12.0	9.5	16.6	10.4	12.5	7.7	8.85	8.85	7.75	8.25
17	16.0	10.7	11.8	10.05	15.6	10.3	14.7	7.75	8.7	8.7	7.45	8.25
18	18.4	9.8	11.5	10.4	14.8	10.0	13.8	7.9	8.5	8.55	7.45	8.25
19	20.2	10.2	11.4	11.0	13.6	9.8	12.6	10.0	8.35	8.5	7.4	8.3
20	21.05	10.7	11.2	11.05	12.9	9.7	11.4	9.65	8.2	8.35	7.35	8.15
21	21.2	10.8	11.1	10.7	12.6	10.1	10.5	9.9	8.05	8.25	7.35	7.85
22	21.0	10.5	11.0	10.45	13.2	9.6	9.95	9.85	8.0	8.3	7.35	7.8
23	21.0	10.55	10.9	10.2	14.25	9.3	9.5	9.8	7.9	8.15	7.35	7.95
24	20.7	10.3	10.8	10.0	17.8	9.2	9.3	9.8	7.95	8.3	7.4	7.9
25	20.3	10.1	10.7	9.9	19.5	9.1	9.1	9.85	8.4	8.35	7.35	7.9
26	19.8	10.4	10.5	9.9	20.05	9.1	8.9	9.6	8.45	8.25	7.35	7.9
27	19.1	13.2	10.4	10.05	20.2	10.2	8.7	8.95	8.45	8.3	7.85	7.9
28	18.5	15.9	10.3	10.4	19.9	14.8	8.6	8.6	9.15	8.25	13.25	8.2
29	17.0	.....	10.3	10.5	19.6	14.7	8.55	8.2	9.0	8.3	13.8	13.4
30	15.6	.....	10.3	10.65	19.2	13.4	8.5	7.95	8.9	8.15	13.35	15.7
31	14.5	.....	10.1	.....	18.1	.....	9.0	7.9	.....	8.15	.....	15.2

DAILY GAGE HEIGHT, IN FEET, OF SANGAMON RIVER AT RIVERTON, ILLINOIS—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1911												
1	14.5	17.7	13.45	10.9	14.4	10.0	9.3	7.4	7.8	27.1	12.3	14.3
2	14.1	17.65	13.1	10.7	16.0	9.8	8.7	7.35	7.6	26.6	12.1	14.2
3	13.5	17.4	12.55	10.9	16.1	9.6	8.4	7.3	7.4	25.5	11.9	14.1
4	12.1	16.65	12.25	13.0	16.0	9.4	8.1	7.3	7.3	26.4	11.6	13.9
5	11.6	14.9	11.35	15.9	15.8	9.3	8.0	7.2	7.2	25.4	11.5	13.6
6	11.3	13.8	11.65	17.9	15.4	9.1	7.9	7.15	7.2	24.8	11.5	13.3
7	11.25	13.25	11.9	18.5	14.4	9.4	7.7	7.1	7.4	23.9	11.8	13.1
8	11.2	12.9	14.25	18.4	13.45	9.0	7.6	8.0	8.2	23.2	12.0	12.9
9	10.8	12.85	15.75	18.2	12.7	8.8	7.5	8.2	10.7	22.6	12.1	12.7
10	10.2	12.5	16.55	17.8	12.3	8.5	7.5	8.4	12.8	21.9	12.1	12.6
11	10.0	12.4	16.75	17.0	12.0	8.5	7.4	8.1	11.0	21.0	12.0	12.8
12	9.9	12.25	15.8	15.6	11.7	8.4	7.4	7.9	10.1	19.6	16.0	13.0
13	9.8	12.0	15.45	14.7	11.5	8.2	7.7	7.6	10.0	17.5	17.4	13.1
14	17.3	11.85	14.75	17.1	11.2	8.2	7.5	7.4	13.2	16.0	17.8	13.1
15	20.5	12.2	13.85	20.3	10.9	8.1	7.3	7.3	13.9	15.0	17.8	13.1
16	21.6	12.35	13.15	20.9	10.7	8.1	7.25	7.2	13.8	14.4	17.7	13.0
17	20.5	12.65	12.7	20.6	10.6	8.0	7.2	7.1	14.4	13.9	17.9	13.0
18	19.5	13.6	12.35	20.5	10.5	8.0	7.1	8.0	14.1	13.6	19.1	12.8
19	18.9	14.45	12.15	20.4	10.3	7.9	7.0	6.9	14.2	13.3	20.2	12.6
20	18.7	15.0	11.85	19.8	10.2	7.85	7.0	6.8	14.5	13.0	20.1	12.6
21	18.9	15.75	11.6	19.0	11.8	7.9	7.0	6.7	14.6	12.8	19.9	13.2
22	17.2	15.55	11.4	17.7	13.4	8.0	7.0	6.7	13.9	12.9	19.5	16.2
23	15.65	15.3	11.2	16.0	12.6	7.9	7.0	6.7	12.8	13.1	19.2	17.4
24	14.0	14.75	11.0	14.8	11.4	7.9	7.0	7.0	11.8	13.4	18.8	17.45
25	13.45	14.3	10.8	14.1	10.8	10.6	7.0	7.55	16.9	13.7	18.4	17.1
26	13.3	13.95	10.7	13.6	10.4	9.5	7.0	7.9	19.7	13.9	17.8	16.8
27	13.9	13.75	10.9	13.1	10.2	9.7	7.0	8.0	19.3	13.9	17.1	17.3
28	16.25	13.6	10.9	12.9	10.0	9.4	6.9	7.9	20.3	13.6	16.1	17.5
29	17.1	.....	10.9	12.9	9.8	9.2	6.9	10.4	23.55	13.1	15.3	18.0
30	17.35	.....	11.0	13.0	9.8	9.4	6.9	9.6	26.4	12.7	14.8	16.4
31	17.5	.....	11.0	.....	10.2	.....	6.85	8.3	.....	12.5	.....	16.0

NOTE—Ice conditions existed December 8-31, 1909. On December 30, 1909, ice was about one foot thick one-fourth mile above the gage. Practically no ice was present in 1910 except during the first few days of January. No ice present during 1911.

RATING TABLE FOR SANGAMON RIVER AT RIVERTON, ILLINOIS, FROM FEBRUARY 13, 1908 TO DECEMBER 31, 1911.

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
6.60	60	9.50	460	12.40	1,425	15.30	2,815
6.70	67	9.60	486	12.50	1,464	15.40	2,870
6.80	75	9.70	513	12.60	1,503	15.50	2,925
6.90	83	9.80	542	12.70	1,543	15.60	2,980
7.00	92	9.90	572	12.80	1,583	15.70	3,035
7.10	101	10.00	603	12.90	1,624	15.80	3,090
7.20	110	10.10	634	13.00	1,665	15.90	3,145
7.30	119	10.20	665	13.10	1,706	16.00	3,200
7.40	128	10.30	696	13.20	1,747	16.10	3,258
7.50	138	10.40	728	13.30	1,788	16.20	3,316
7.60	148	10.50	760	13.40	1,830	16.30	3,374
7.70	158	10.60	792	13.50	1,872	16.40	3,432
7.80	168	10.70	824	13.60	1,915	16.50	3,490
7.90	179	10.80	856	13.70	1,959	16.60	3,548
8.00	190	10.90	888	13.80	2,004	16.70	3,606
8.10	202	11.00	920	13.90	2,050	16.80	3,664
8.20	214	11.10	955	14.00	2,100	16.90	3,722
8.30	227	11.20	990	14.10	2,155	17.00	3,780
8.40	240	11.30	1,025	14.20	2,210	17.10	3,838
8.50	254	11.40	1,060	14.30	2,265	17.20	3,896
8.60	270	11.50	1,095	14.40	2,320	17.30	3,954
8.70	287	11.60	1,131	15.50	2,375	17.40	4,012
8.80	305	11.70	1,167	14.60	2,430	17.50	4,070
8.90	324	11.80	1,203	14.70	2,485	17.60	4,130
9.00	344	11.90	1,239	14.80	2,540	17.70	4,190
9.10	366	12.00	1,275	14.90	2,595	17.80	4,250
9.20	388	12.10	1,312	15.00	2,650	17.90	4,310
9.30	411	12.20	1,349	15.10	2,705	18.00	4,370
9.40	435	12.30	1,387	15.20	2,760	18.10	4,430

RATING TABLE FOR SANGAMON RIVER AT RIVERTON, ILLINOIS—*Concluded*

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
18.20	4,490	20.20	6,225	22.20	8,940	24.20	12,675
18.30	4,555	20.30	6,335	22.30	9,105	24.30	12,885
18.40	4,620	20.40	6,450	22.40	9,275	24.40	13,095
18.50	4,690	20.50	6,565	22.50	9,445	24.50	13,310
18.60	4,760	20.60	6,685	22.60	9,620	24.60	13,525
18.70	4,835	20.70	6,805	22.70	9,795	24.70	13,745
18.80	4,910	20.80	6,930	22.80	9,975	24.80	13,965
18.90	4,990	20.90	7,055	22.90	10,155	24.90	14,185
19.00	5,070	21.00	7,185	23.00	10,340	25.00	14,410
19.10	5,155	21.10	7,315	23.10	10,525	25.10	14,635
19.20	5,240	21.20	7,450	23.20	10,710	25.20	14,860
19.30	5,330	21.30	7,585	23.30	10.900	25.30	15,085
19.40	5,420	21.40	7,725	23.40	11,090	25.40	15,310
19.50	5,515	21.50	7,865	23.50	11,280	25.50	15,540
19.60	5,610	21.60	8,010	23.60	11,475	25.60	15,770
19.70	5,705	21.70	8,155	23.70	11,670	25.70	16,000
19.80	5,805	21.80	8,305	23.80	11,865	25.80	16,230
19.90	5,905	21.90	8,460	23.90	12,065	25.90	16,460
20.00	6,010	22.00	8,615	24.00	12,265	26.00	16,690
20.10	6,115	22.10	8,775	24.10	12,470	27.00	18,990

NOTE—The above table is not applicable for ice or obstructed channel conditions. It is based on discharge measurements made during 1908–11 and is well defined between gage heights 7.5 feet and 18.0 feet. Above 18.0 feet the rating curve depends on one measurement at gage height 25.4 feet.

DAILY DISCHARGE, IN SECOND-FEET, OF SANGAMON RIVER AT RIVERTON, ILLINOIS, FOR 1908–11

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1	.....	.....	8,780	3,140	6,450	3,320	460	190	148	92	67	101
2	.....	.....	8,460	3,200	5,800	2,700	435	179	148	92	67	101
3	.....	.....	8,160	3,260	5,420	2,260	388	179	138	83	67	101
4	.....	.....	7,860	3,200	8,300	2,000	344	168	138	83	60	101
5	.....	.....	7,580	3,090	10,500	1,870	344	168	128	83	60	101
6	.....	.....	8,010	3,640	11,900	1,750	324	158	119	83	60	101
7	.....	.....	7,860	3,200	14,000	1,620	513	158	119	83	60	101
8	.....	.....	8,010	3,430	17,400	1,460	792	158	110	83	60	101
9	.....	.....	8,780	3,610	17,600	1,280	760	158	110	83	60	101
10	.....	.....	9,100	3,720	16,700	1,240	603	158	110	83	60	101
11	.....	.....	8,780	3,840	16,200	1,170	460	158	110	83	60	101
12	.....	.....	8,460	3,840	15,300	1,100	411	158	110	83	60	101
13	.....	3,490	8,160	3,780	14,000	1,060	366	158	110	83	60	101
14	.....	4,370	7,860	3,720	12,900	920	324	158	110	75	60	101
15	.....	5,900	7,180	3,430	10,900	856	287	158	110	75	60	101
16	.....	6,010	6,800	3,140	10,700	792	287	158	110	75	60	101
17	.....	7,060	5,520	2,700	11,100	728	270	158	101	75	67	101
18	.....	6,560	3,840	2,380	11,300	696	270	148	101	75	75	101
19	.....	6,010	3,490	2,100	10,500	665	254	148	92	75	75	101
20	.....	6,450	3,200	2,050	9,620	572	254	148	83	75	75	101
21	.....	6,560	2,920	1,830	8,780	542	254	148	82	67	75	101
22	.....	6,560	2,700	1,830	9,620	486	254	138	92	67	75	101
23	.....	6,120	2,600	2,050	9,280	460	254	128	92	67	83	101
24	.....	6,010	2,480	2,600	8,940	435	270	128	92	67	83	101
25	.....	6,680	2,320	3,200	8,620	411	270	119	92	67	92	101
26	.....	8,160	2,260	4,760	8,460	388	254	119	92	67	92	101
27	.....	8,780	2,430	5,700	7,720	366	254	110	92	67	101	101
28	.....	8,620	2,650	7,320	6,560	344	240	110	92	67	101	101
29	.....	8,300	2,980	7,060	5,700	344	227	100	92	67	101	101
30	.....	.....	3,140	6,800	5,070	486	214	101	92	67	101	101
31	.....	.....	3,260	.....	4,310	.....	202	128	.....	67	.....	101
1909												
1	101	214	4,390	920	3,490	6,010	824	760	168	190	240	888
2	101	210	4,140	888	3,200	5,070	603	728	168	190	240	792
3	101	270	3,900	888	3,090	5,070	542	696	168	190	254	776
4	101	270	3,430	888	2,980	5,280	186	665	168	190	254	744
5	101	287	3,040	888	2,760	4,370	634	634	168	190	254	665
6	101	324	2,650	856	2,650	3,720	1,960	572	168	190	254	665
7	101	344	2,480	856	2,540	3,090	6,560	542	168	190	254	650
8	101	435	2,050	888	2,600	2,870	5,900	542	168	190	270	400
9	101	486	1,460	1,060	2,700	3,010	5,900	542	158	190	305	300

DAILY DISCHARGE, IN SECOND-FEET, OF SANGAMON RIVER AT RIVERTON, ILLINOIS, FOR 1908–11—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
10	101	572	1,420	1,310	3,490	2,620	5,520	513	158	190	324	400
11	101	728	1,280	1,500	3,430	2,380	5,070	460	158	190	344	542
12	101	760	1,200	1,620	3,900	2,380	6,560	411	148	190	344	603
13	101	856	1,100	1,750	4,690	2,480	9,440	388	148	190	355	696
14	101	888	1,240	2,000	4,620	2,600	11,700	324	145	190	355	888
15	101	920	1,280	2,100	4,560	1,960	12,900	287	148	190	400	1,200
16	101	990	1,310	2,320	4,370	1,710	12,300	287	179	190	800	1,420
17	101	2,100	1,310	3,140	4,010	1,620	8,620	240	190	190	1,000	1,660
18	101	2,700	1,240	3,720	3,610	1,540	7,180	227	190	190	1,200	1,620
19	101	3,200	1,200	4,620	3,320	1,310	6,560	202	190	240	1,200	1,420
20	110	3,780	1,130	5,520	2,870	1,200	5,420	202	214	254	1,200	1,280
21	119	4,370	1,130	6,930	2,320	1,130	4,370	190	214	254	1,200	1,170
22	119	4,760	1,100	8,460	1,830	1,020	3,900	179	202	254	1,220	1,000
23	119	5,420	1,100	9,620	1,500	990	3,490	168	202	240	1,240	800
24	128	5,610	1,050	9,100	1,170	920	2,760	168	202	240	1,260	700
25	138	5,360	1,020	8,620	1,660	824	2,100	158	190	240	1,280	600
26	138	5,120	1,020	7,720	2,130	920	1,710	158	190	240	1,280	500
27	138	4,880	990	6,560	2,980	1,130	1,540	158	190	240	1,240	500
28	138	4,630	1,010	5,070	3,430	1,200	1,130	148	190	227	1,150	400
29	148	.....	955	4,430	4,070	1,130	990	148	190	227	1,060	400
30	148	.....	920	4,070	4,070	1,060	856	148	190	227	920	300
31	179	.....	920	.....	5,070	.....	792	148	.....	227	.....	300
1910												
1	300	2,000	4,010	603	792	3,520	1,540	388	262	296	202	1,370
2	400	1,790	4,430	588	744	2,700	1,240	305	214	287	196	1,370
3	500	1,660	4,690	344	856	2,210	955	270	168	247	202	1,370
4	760	1,620	5,070	344	2,430	1,870	824	240	173	270	184	1,280
5	760	1,600	5,330	665	2,790	1,620	1,130	220	168	270	184	972
6	680	1,580	5,070	728	2,430	1,540	1,350	202	163	314	190	557
7	665	1,540	4,430	792	2,080	1,460	1,100	190	190	513	184	473
8	665	1,500	3,840	728	2,050	1,310	1,130	179	254	572	190	278
9	696	1,420	3,200	665	2,380	1,170	888	190	972	728	190	324
10	760	1,310	2,700	603	2,400	1,280	634	179	1,060	776	184	296
11	728	1,280	2,210	572	2,380	1,710	513	168	1,180	680	184	262
12	634	1,200	1,920	542	3,640	1,130	486	163	1,170	572	184	247
13	856	1,170	1,660	513	4,370	920	665	158	990	448	184	234
14	2,380	990	1,500	486	4,250	808	728	153	712	388	190	240
15	3,140	955	1,350	486	3,780	760	920	143	460	334	184	220
16	3,320	990	1,280	460	3,550	728	1,460	158	314	314	163	220
17	3,200	824	1,200	618	2,980	696	2,480	163	287	287	133	220
18	4,620	542	1,100	728	2,540	603	2,000	179	254	262	133	220
19	6,220	665	1,060	920	1,920	542	1,500	603	234	254	128	227
20	7,250	824	990	938	1,620	513	1,060	500	214	234	123	208
21	7,450	856	955	824	1,500	634	760	572	196	220	123	174
22	7,180	760	920	744	1,750	486	588	557	190	227	123	168
23	7,180	776	888	665	2,240	411	460	542	179	208	123	184
24	6,800	696	856	603	4,250	388	411	542	184	227	128	179
25	6,340	634	824	572	5,520	366	366	557	240	234	123	179
26	5,800	728	760	572	6,060	366	324	486	247	220	123	179
27	5,160	1,750	728	618	6,220	665	287	334	247	227	174	179
28	4,690	3,140	696	728	5,900	2,540	270	270	377	220	1,770	214
29	3,780	.....	696	760	5,610	2,480	262	214	344	227	2,000	1,830
30	2,980	.....	696	808	5,240	1,830	254	184	324	208	1,810	3,040
31	2,380	.....	634	.....	4,430	.....	344	179	.....	208	.....	2,760
1911												
1	2,380	4,190	1,850	888	2,320	603	411	128	168	19,200	1,390	2,260
2	2,160	4,160	1,710	824	3,200	542	287	124	148	18,100	1,310	2,210
3	1,870	4,010	1,480	888	3,260	486	240	119	128	17,800	1,240	2,160
4	1,310	3,580	1,370	1,660	3,200	435	202	119	119	17,600	1,180	2,050
5	1,130	2,600	1,220	3,140	3,090	411	190	110	110	15,300	1,100	1,920
6	1,020	2,000	1,150	4,310	2,870	366	179	106	110	14,000	1,100	1,790
7	1,010	1,770	1,240	4,690	2,320	435	158	101	128	12,100	1,200	1,710
8	990	1,620	2,240	4,620	1,850	344	148	190	214	10,700	1,280	1,620
9	856	1,600	3,060	4,490	1,540	305	138	214	824	9,620	1,310	1,540
10	665	1,460	3,520	4,250	1,390	254	138	240	1,580	8,460	1,310	1,500
11	603	1,420	3,640	3,780	1,280	254	128	202	920	7,180	1,280	1,580
12	572	1,370	3,090	2,980	1,170	240	128	179	634	5,610	3,200	1,660
13	542	1,280	2,900	2,480	1,100	214	158	148	603	4,070	4,010	1,710
14	3,950	1,220	2,510	3,840	990	214	138	128	1,750	3,200	4,250	1,710
15	6,560	1,350	2,030	6,340	888	202	119	119	2,050	2,650	4,250	1,710
16	8,010	1,410	1,730	7,060	824	202	114	110	2,000	2,320	4,190	1,660
17	6,560	1,520	1,540	6,680	792	190	110	101	2,320	2,050	4,310	1,660
18	5,520	1,920	1,410	6,560	760	190	101	92	2,160	1,920	5,160	1,580
19	4,990	2,350	1,330	6,450	696	179	92	83	2,210	1,790	6,220	1,500
20	4,810	2,650	1,220	5,800	665	174	92	75	2,380	1,660	6,120	1,500
21	4,990	3,000	1,130	5,070	1,200	179	92	67	2,430	1,580	5,900	1,750
22	3,900	2,950	1,060	4,190	1,830	190	92	67	2,050	1,620	5,520	3,320

DAILY DISCHARGE, IN SECOND-FEET OF SANGAMON RIVER, AT RIVERTON, ILLINOIS, FOR 1908-11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
23	3,010	2,820	990	3,200	1,500	179	92	67	1,580	1,710	5,240	4,010
24	2,100	2,510	920	2,540	1,060	179	92	92	1,200	1,830	4,910	4,040
25	1,850	2,260	856	2,160	856	792	92	143	3,720	1,960	4,620	3,840
26	1,790	2,080	824	1,920	728	460	92	179	5,700	2,050	4,250	3,660
27	2,050	1,980	888	1,710	665	513	92	190	5,800	2,050	3,840	3,950
28	3,340	1,920	888	1,620	603	435	83	179	6,340	1,920	3,260	4,070
29	3,840	.....	888	1,620	542	388	83	728	11,400	1,710	2,820	4,370
30	3,980	.....	920	1,660	542	435	83	486	17,600	1,540	2,540	3,430
31	4,070	.....	920	.....	665	.....	79	227	.....	1,460	.....	3,200

NOTE—Discharges interoplated for days of missing gage heights. Discharge estimated December 8-10, 22-31, 1909, and January 1-3, 1910.

The daily and monthly discharges published here differ from those previously published in U. S. Geological Survey Water Supply Papers Nos. 245, 265 and 285, and in report of Internal Improvement Commission of Illinois on Surface Water, 1908-10, because of revising rating curve on account of discharge measurements made in 1911.

MONTHLY DISCHARGE OF SANGAMON RIVER AT RIVERTON, ILLINOIS, FOR 1908-11

[Drainage area, 2,560 square miles]

Month	Discharge in second-feet				Runoff—depth in inches on drainage area	Accuracy
	Maximum	Minimum	Mean	Per square mile		
1908						
February (13-29)	8,780	3,490	6,570	2.57	1.62	B.
March	9,100	2,260	5,670	2.21	2.55	B.
April	7,320	1,830	3,570	1.40	1.56	B.
May	17,600	4,310	10,300	4.03	4.65	B.
June	3,320	344	1,080	.422	.47	B.
July	792	202	350	.137	.16	B.
August	190	101	147	.057	.07	B.
September	148	83	107	.042	.05	C.
October	92	67	76.1	.030	.03	C.
November	101	60	72.6	.028	.03	C.
December	101	101	101	.039	.05	C.
1909						
January	179	101	114	.044	.05	C.
February	.....	214	2,160	.844	.88	B.
March	.....	.....	1,690	.660	.76	B.
April	9,620	856	3,610	1.41	1.57	B.
May	5,070	1,170	3,200	1.25	1.44	B.
June	6,010	824	2,350	.918	1.02	B.
July	12,900	486	4,460	1.74	2.01	B.
August	760	148	355	.139	.16	B.
September	214	148	178	.070	.08	C.
October	254	190	211	.082	.09	B.
November	.....	240	723	.282	.31	C.
December	1,660	.....	783	.306	.35	C.
The year	.....	101	1,950	.645	8.72	
1910						
January	7,450	.....	3,170	1.24	1.43	B.
February	3,140	634	1,240	.484	.50	B.
March	5,330	634	2,120	.827	.95	B.
April	938	344	641	.250	.28	B.
May	6,220	744	3,180	1.24	1.43	B.
June	3,520	366	1,240	.484	.54	B.
July	2,480	254	869	.339	.39	B.
August	603	143	296	.115	.13	B.
September	1,180	163	399	.156	.17	B.
October	776	208	338	.132	.15	B.
November	2,000	123	334	.131	.15	B.
December	3,040	168	635	.248	.29	B.
The year	7 450	123	1,210	.473	6.41	

MONTHLY DISCHARGE OF SANGAMON RIVER AT RIVERTON, ILLINOIS, FOR 1908-11—*Concluded*

Month	Discharge in second-feet				Runoff—depth in inches on drainage area	Accuracy
	Maximum	Minimum	Mean	Per square mile		
1911						
January	8,010	542	2,920	1.14	1.31	B.
February	4,190	1,220	2,250	.879	.92	A.
March	3,640	824	1,630	.637	.73	A.
April	7,060	824	3,580	1.40	1.56	A.
May	3,260	542	1,430	.559	.64	A.
June	792	174	333	.130	.14	B.
July	411	79	137	.054	.06	B.
August	728	67	165	.064	.07	B.
September	17,600	110	2,610	1.02	1.14	A.
October	19,200	1,460	6,280	2.45	2.82	A.
November	6,220	1,100	3,280	1.28	1.43	B.
December	4,370	1,500	2,410	.941	1.09	B.
The year	19,200	67	2,250	.879	11.91	

SANGAMON RIVER AT SPRINGFIELD, ILLINOIS

Location.—At the Chicago, Peoria and St. Louis Railroad trestle, one-fourth mile northeast of the Springfield Waterworks, Springfield, Ill.

Records available.—April 11 to August 22, 1903.

Drainage area.—Two thousand six hundred and seventy square miles.

Gage.—Vertical staff gage fastened to sheeting on pier.

Channel.—Probably permanent; choked with logs and drift.

Regulation.—Dam of city waterworks a short distance below the section probably affects the flow at low stages.

DISCHARGE MEASUREMENTS OF SANGAMON RIVER AT SPRINGFIELD, ILLINOIS, IN 1903

Date	Hydrographer	Gage height	Discharge
		Feet	*Second-feet*
April 11	E. H. Heilbron	+3.05	4,790
July 4	E. H. Heilbron	—3.90	543

DAILY GAGE HEIGHT, IN FEET, OF SANGAMON RIVER AT SPRINGFIELD, ILLINOIS, FOR 1903

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1					1.50		2.45					
2					1.50		2.55	4.34				
3							2.90	4.05				
4							3.90	4.05				
5							2.55	4.05				
6							2.55	4.05				
7							2.57	4.05				
8							2.60	4.05				
9							2.60	4.10				
10							2.60	4.10				
11				3.05			2.65	4.10				
12				5.61				4.05				
13				5.51				4.05				
14				6.21	.75			4.15				
15				6.76	1.05			4.15				

DAILY GAGE HEIGHT, IN FEET, OF SANGAMON RIVER AT SPRINGFIELD, ILLINOIS, FOR 1903—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16				6.76	1.38			1.90				
17				*	1.93			1.65				
18				*	2.30			1.63				
19					2.75			1.90				
20					3.13			2.60				
21					2.58			3.10				
22					2.05			4.40				
23					2.08							
24					2.58							
25					3.03							
26				1.45	3.15							
27				1.45	3.30							
28				1.45		2.45						
29				1.50		2.35						
30				1.50		2.20						
31												

* Water over gage.

SANGAMON RIVER NEAR OAKFORD, ILLINOIS

Location.—At highway bridge three miles northeast of Oakford, Ill., near the northwest corner of T. 19 N., R. 7 W., two and one-half miles above the Chicago, Peoria and St. Louis Railroad bridge, and one and one-fourth miles above the mouth of Crane Creek.

Records available.—October 26, 1909, to June 30, 1911, and December 10 to 31, 1911.

Drainage area.—Five thousand square miles.

Gage.—Standard chain gage attached to bridge; datum unchanged.

Channel.—Shifting; the river for some distance above and below the station has been dredged and straightened, thus increasing the slope considerably and thereby disturbing the regimen of the river. Conditions along the improved section are probably reverting to their former natural state. Measurements to date, however, indicate little or no change in the relation between gage height and discharge.

Discharge measurements.—Made from downstream side of bridge and wooden trestle approaches.

Floods.—The floods of February and March, 1907, May, 1908, and October, 1911, reached a height of about 21 feet on the present gage.

Winter flow.—Ice may affect the relation between gage height and discharge during portions of December, January and February.

Regulation.—None.

Accuracy.—There may be backwater effect at times, due to ice jams or drift lodging at the railroad trestle a few miles below the gaging station.

DISCHARGE MEASUREMENTS OF SANGAMON RIVER NEAR OAKFORD, ILLINOIS, IN 1909–11

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1909		*Feet*	*Square feet*	*Feet*	*Second-feet*
October 26	H. J. Jackson	223	591	3.10	817
November 27	H. J. Jackson	255	1,480	6.82	2,920
1910					
March 17	M. E. McChristie	255	1,300	6.03	2,260
March 28	H. J. Jackson	241	913	4.71	1,510
May 18	H. J. Jackson	277	1,800	8.26	4,180
May 21	H. J. Jackson	261	1,310	6.50	2,740
June 1	H. J. Jackson	324	2,760	11.30	7,130
June 3	H. J. Jackson	280	1,910	8.57	4,310
December 26	P. S. Monk	125	248	1.94	342
1911					
March 21	P. S. Monk	257	1,040	5.95	2,300
October 10	Monk & Brown	1,518	8,510	16.60	16,400

DAILY GAGE HEIGHT, IN FEET, OF SANGAMON RIVER NEAR OAKFORD, ILLINOIS, FOR 1909–11

[Bert Weaver, observer]

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
1											2.6	5.7
2											2.6	5.45
3											2.6	5.3
4												
5											2.6	
6											2.55	4.9
7												
8												4.61
9												4.25
10											2.65	4.05
11												
12											2.9	
13											4.85	4.7
14												
15											6.15	5.55
16											6.5	6.0
17												
18											8.4	6.4
19												
20											9.1	8.4
21												
22											8.4	8.0
23											7.9	
24												7.6
25												
26										3.1	7.2	
27										3.1	6.8	
28										2.95		6.6
29										2.85	6.3	
30										2.7	5.9	5.75
31												5.74
*1910												
1		9.15	10.4	4.3	5.0	11.25	6.3	2.2	2.4	2.5	1.75	4.45
2			10.5	4.25	4.95	10.0	5.85	2.8	2.4	2.4	1.7	4.35
3		8.25	10.45	4.2	4.8	8.75	5.4	2.9	2.6	2.35	1.7	4.05
4			10.5	4.2	5.0	8.0	4.1	2.4	3.0	2.3	1.7	4.5
5		7.95	10.6	4.3	6.65	7.4	4.4	2.4	4.2	2.35	1.7	4.3
6				4.45	7.3	6.9	4.4	2.4	4.2	2.8	1.7	3.9
7		7.25		4.9	7.1	6.6	4.4	2.4	4.2	2.9	1.65	3.1
8			10.7	4.7	7.0	6.3	4.4	2.5	4.4	3.5	1.6	2.75
9			10.05	4.5	6.9	6.0	4.5	2.6	4.2	3.5	1.6	2.7
10		6.95	9.3	4.35	7.05	6.0	4.2	2.4	4.2		1.6	2.75
11				4.2	7.3	6.5	4.0	2.0	4.2	3.35	1.55	2.65
12		6.5		4.1	7.65	6.45	3.8	2.0	4.2	3.25	1.55	2.45
13			7.3	4.0	8.5	5.6	3.6	1.8	4.2	3.2	1.6	2.45
14		5.7		4.0	9.3	5.15	3.55	1.7	4.2	2.95	1.6	2.3
15	9.4		6.65	3.95	9.35	4.85	3.5	1.6	4.2	2.85	1.65	2.25
16		5.85		4.0	9.2	4.6	4.4	1.8	4.4	2.6	1.65	2.2
17	10.9		6.05	4.2	8.75	4.5	5.6	1.7	4.6	2.5	1.55	2.05
18	11.7	5.0		4.45	8.5	4.3	6.2	2.9	4.0	2.4	1.7	2.1
19	12.6	4.5	5.7	4.7	7.65	4.1	6.1	2.2	3.6	2.3	1.75	2.1

DAILY GAGE HEIGHT, IN FEET, OF SANGAMON RIVER NEAR OAKFORD, ILLINOIS, FOR 1909–11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug	Sept.	Oct.	Nov.	Dec.
1910												
20	13.0	.....	.....	4.8	6.95	4.0	5.1	2.4	3.0	2.2	1.7	2.1
21	.....	5.3	5.4	4.9	6.5	3.85	4.6	2.7	.....	2.2	1.7	2.1
22	14.35	.....	.....	4.75	6.3	3.95	4.15	3.0	2.2	2.1	1.65	2.1
23	.....	4.8	.....	4.55	6.6	4.0	3.7	3.1	2.2	2.05	1.6	2.0
24	.....	4.7	5.2	4.4	7.65	3.85	3.7	3.1	2.15	2.0	1.6	1.9
25	.....	4.75	5.0	4.35	9.5	4.0	3.8	3.2	2.2	1.95	1.6	1.9
26	14.2	.....	4.9	4.35	10.4	4.05	3.0	3.0	2.55	1.9	1.65	1.9
27	13.8	.....	.....	4.35	10.8	4.8	2.9	3.2	2.5	1.9	1.75	1.8
28	.....	7.75	4.7	4.85	11.0	7.0	2.8	2.7	2.55	1.9	2.4	2.15
29	13.0	.....	4.6	5.05	11.2	7.0	2.7	2.2	2.65	1.85	4.05	2.4
30	.....	.....	4.55	4.95	11.5	7.0	2.4	2.0	2.65	1.85	4.75	4.8
31	10.0	.....	4.4	.....	11.9	.....	2.3	2.4	.....	1.8	.....	6.5
*1911												
1	6.9	11.1	6.7	4.9	6.95	4.05	.....	.....	.....	.....	.....	.....
2	6.5	10.25	6.55	4.8	7.85	3.9	.....	.....	.....	.....	.....	.....
3	6.5	9.9	6.35	4.9	8.05	3.85	.....	.....	.....	.....	.....	.....
4	8.6	9.6	6.0	5.25	8.35	3.7	.....	.....	.....	20.6	.....	.....
5	8.0	9.15	5.8	7.35	8.1	3.6	.....	.....	.....	.....	.....	.....
6	7.8	8.0	5.7	9.05	7.9	3.55	.....	.....	.....	.....	.....	.....
7	7.7	7.3	5.6	9.95	7.8	3.4	.....	.....	.....	.....	.....	.....
8	7.5	6.75	6.9	10.35	7.1	3.3	.....	.....	.....	.....	.....	.....
9	6.8	6.5	8.4	10.3	6.5	3.15	.....	.....	.....	.....	.....	.....
10	6.7	6.2	9.0	10.05	6.1	3.05	.....	.....	.....	16.6	.....	6.9
11	6.5	6.1	9.2	9.85	5.8	3.0	.....	.....	.....	.....	.....	6.8
12	5.9	6.0	9.1	9.4	5.55	2.65	.....	.....	.....	.....	.....	6.85
13	7.1	5.95	9.0	9.25	5.35	2.6	.....	.....	.....	.....	.....	6.95
14	9.1	5.9	8.6	9.2	5.15	2.55	.....	.....	.....	.....	.....	7.1
15	10.2	6.0	8.1	9.9	4.9	2.5	.....	.....	.....	.....	.....	7.05
16	11.0	6.85	7.5	11.1	4.7	2.4	.....	.....	.....	.....	.....	7.1
17	12.1	7.0	7.0	12.0	4.55	2.35	.....	.....	.....	.....	.....	7.0
18	12.0	7.2	6.5	12.2	4.45	2.3	.....	.....	.....	.....	.....	7.0
19	11.8	7.5	6.5	12.3	4.35	2.3	.....	.....	.....	.....	.....	6.8
20	11.5	8.0	6.2	12.0	4.25	2.25	.....	.....	.....	.....	.....	6.5
21	11.4	8.6	5.9	11.3	4.2	2.2	.....	.....	.....	.....	.....	6.8
22	10.9	8.55	5.65	11.35	5.85	2.15	.....	.....	.....	.....	.....	8.2
23	10.55	8.25	5.4	10.7	6.5	2.15	.....	.....	.....	.....	.....	10.1
24	9.3	8.1	5.2	9.05	5.8	2.2	.....	.....	.....	.....	.....	11.0
25	8.0	7.9	5.15	8.6	5.45	4.35	.....	.....	.....	.....	.....	11.2
26	8.3	7.4	5.0	7.7	4.8	3.75	.....	.....	.....	.....	.....	11.0
27	9.95	7.1	4.95	7.2	4.5	3.9	.....	.....	.....	.....	.....	10.95
28	11.45	6.9	5.0	7.0	4.25	3.05	.....	.....	.....	.....	.....	10.9
29	12.9	.....	5.0	6.9	4.15	4.2	.....	.....	.....	.....	.....	10.8
30	12.5	.....	5.0	6.9	4.15	3.5	.....	.....	.....	.....	.....	10.65
31	11.6	.....	5.0	.....	4.15	.....	.....	.....	.....	.....	.....	10.3

* Ed. J. Bonnett, observer.

NOTE—Ice conditions December 12–31, 1909. Gage heights are to top of ice December 20–31, 1909. An ice gorge at railroad bridge two and one-half miles below gage caused rise on December 18, 1909. Ice present January 1–17, 1910 and January 4–14, 1911. Gage read to top of ice January 7–12, 1911. No gage reader from July 1-December 9 1910. Gage is in an isolated place and it is difficult to obtain an observer.

RATING TABLE FOR SANGAMON RIVER NEAR OAKFORD, ILLINOIS, FROM OCTOBER 26, 1909–DECEMBER 31, 1911

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.50	205	3.10	780	4.70	1,500	6.30	2,545
1.60	240	3.20	820	4.80	1,555	6.40	2,620
1.70	275	3.30	860	4.90	1,610	6.50	2,695
1.80	310	3.40	900	5.00	1,670	6.60	2,770
1.90	345	3.50	940	5.10	1,730	6.70	2,845
2.00	380	3.60	980	5.20	1,790	6.80	2,920
2.10	415	3.70	1,020	5.30	1,850	6.90	2,995
2.20	450	3.80	1,060	5.40	1,910	7.00	3,070
2.30	485	3.90	1,105	5.50	1,970	7.10	3,145
2.40	520	4.00	1,150	5.60	2,040	7.20	3,220
2.50	555	4.10	1,195	5.70	2,110	7.30	3,300
2.60	590	4.20	1,240	5.80	2,180	7.40	3,380
2.70	625	4.30	1,290	5.90	2,250	7.50	3,460
2.80	660	4.40	1,340	6.00	2,320	7.60	3,540
2.90	700	4.50	1,390	6.10	2,395	7.70	3,620
3.00	740	4.60	1,445	6.20	2,470	7.80	3,700

RATING TABLE FOR SANGAMON RIVER NEAR OAKFORD, ILLINOIS, FROM OCTOBER 26, 1909–DECEMBER 31, 1911—*Concluded*

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
7.90	3,780	10.00	5,780	12.10	8,120	14.20	11,055
8.00	3,860	10.10	5,885	12.20	8,240	14.30	11,235
8.10	3,950	10.20	5,990	12.30	8,360	14.40	11,420
8.20	4,040	10.30	6,095	12.40	8,480	14.50	11,610
8.30	4,130	10.40	6,200	12.50	8,600	14.60	11,805
8.40	4,220	10.50	6,305	12.60	8,720	14.70	12,000
8.50	4,310	10.60	6,410	12.70	8,850	14.80	12,200
8.60	4,400	10.70	6,520	12.80	8,970	14.90	12,400
8.70	4,490	10.80	6,630	12.90	9,105	15.00	12,605
8.80	4,580	10.90	6,740	13.00	9,235	15.10	12,810
8.90	4,670	11.00	6,850	13.10	9,370	15.20	13,020
9.00	4,760	11.10	6,960	13.20	9,505	15.30	13,235
9.10	4,860	11.20	7,070	13.30	9,645	15.40	13,450
9.20	4,960	11.30	7,180	13.40	9,785	15.50	13,670
9.30	5,060	11.40	7,290	13.50	9,930	15.60	13,895
9.40	5,160	11.50	7,400	13.60	10,080	15.70	14,125
9.50	5,260	11.60	7,520	13.70	10,230	15.80	14,360
9.60	5,360	11.70	7,640	13.80	10,385	15.90	14,600
9.70	5,465	11.80	7,760	13.90	10,545	16.00	14,840
9.80	5,570	11.90	7,880	14.00	10,710	17.00	17,340
9.90	5,675	12.00	8,000	14.10	10,880	18.00	19,840

NOTE—The above table is not applicable for ice or obstructed channel conditions. It is based on eleven discharge measurements made during 1909–11, and is well defined between gage heights 2 feet and 12 feet. Above gage height 16 feet the rating curve is a tangent, the difference being 250 per tenth. Above 12.0 feet the rating is based on one measurement at 16.6 feet.

DAILY DISCHARGE, IN SECOND-FEET, OF SANGAMON RIVER NEAR OAKFORD, ILLINOIS, FOR 1909–11

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	590	2,110
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	590	1,940
3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	590	1,850
4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	590	1,770
5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	590	1,690
6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	572	1,610
7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	581	1,520
8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	590	1,440
9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	599	1,260
10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	608	1,170
11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	654	1,280
12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	700	1,390
13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,580	1,500
14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,000	1,750
15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,430	2,000
16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,700	2,320
17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,460	2,470
18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,220	2,620
19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,540	2,500
20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,860	2,400
21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,540	2,300
22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,220	2,200
23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,780	2,100
24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,590	2,000
25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,410	1,900
26	.....	.....	.....	.....	.....	.....	.....	.....	.....	780	3,220	1,800
27	.....	.....	.....	.....	.....	.....	.....	.....	.....	780	2,920	1,650
28	.....	.....	.....	.....	.....	.....	.....	.....	.....	720	2,850	1,500
29	.....	.....	.....	.....	.....	.....	.....	.....	.....	680	2,540	1,400
30	.....	.....	.....	.....	.....	.....	.....	.....	.....	625	2,250	1,300
31	.....	.....	.....	.....	.....	.....	.....	.....	.....	608	.....	1,200
1910												
1	.....	4,910	6,200	1,290	1,670	7,120	2,540	450	520	555	292	1,360
2	.....	4,500	6,300	1,260	1,640	5,780	2,220	660	520	520	275	1,320
3	.....	4,080	5,250	1,240	1,560	4,540	1,910	700	590	502	275	1,170
4	.....	3,950	6,300	1,240	1,670	3,860	1,200	520	740	485	275	1,390
5	.....	3,820	6,410	1,290	2,810	3,380	1,340	520	1,240	502	275	1,290
6	.....	3,540	6,450	1,360	3,300	3,000	1,340	520	1,240	660	275	1,100
7	.....	3,260	6,480	1,610	3,150	2,770	1,340	520	1,240	700	258	780

DAILY DISCHARGE, IN SECOND-FEET, OF SANGAMON RIVER NEAR OAKFORD, ILLINOIS, FOR 1909–11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1910												
8	.....	3,180	6,520	1,500	3,070	2,540	1,340	555	1,340	940	240	642
9	.....	3,110	5,830	1,390	3,000	2,320	1,390	590	1,240	940	240	625
10	.....	3,030	5,060	1,320	3,110	2,320	1,240	520	1,240	910	240	642
11	.....	2,860	4,470	1,240	3,300	2,700	1,150	380	1,240	880	222	608
12	.....	2,700	3,890	1,200	3,580	2,660	1,060	380	1,240	840	222	538
13	.....	2,400	3,300	1,150	4,310	2,040	980	310	1,240	820	240	538
14	.....	2,110	3,060	1,150	5,060	1,760	960	275	1,240	720	240	485
15	.....	2,160	2,810	1,130	5,110	1,580	940	240	1,240	680	258	468
16	.....	2,220	2,580	1,150	4,960	1,440	1,340	310	1,340	590	258	450
17	6,740	1,940	2,360	1,240	4,540	1,390	2,040	275	1,440	555	222	398
18	7,640	1,670	2,240	1,360	4,310	1,290	2,470	700	1,150	520	275	415
19	8,720	1,390	2,110	1,500	3,580	1,200	2,400	450	980	485	292	415
20	9,240	1,620	2,010	1,560	3,030	1,150	1,730	520	740	450	275	415
21	10,300	1,850	1,910	1,610	2,700	1,080	1,440	625	595	450	275	415
22	11,300	1,700	1,870	1,530	2,540	1,130	1,130	740	450	415	258	415
23	11,200	1,560	1,830	1,420	2,770	1,150	1,020	780	450	398	240	380
24	11,200	1,500	1,790	1,340	3,580	1,080	1,020	900	432	380	240	345
25	11,100	1,530	1,670	1,320	5,260	1,150	1,060	820	450	362	240	345
26	11,100	2,240	1,610	1,320	6,200	1,170	740	740	572	345	258	345
27	10,400	2,950	1,560	1,320	6,630	1,560	700	820	555	345	292	310
28	9,820	3,660	1,500	1,580	6,850	3,070	660	625	572	345	520	432
29	9,240	.....	1,440	1,700	7,070	3,070	625	450	608	328	1,170	520
30	7,560	.....	1,420	1,640	7,400	3,070	520	380	608	328	1,530	1,560
31	5,780	.....	1,340	.....	7,880	.....	485	520	.....	310	.....	2,700
1911												
1	3,000	6,960	2,840	1,610	3,030	1,170	.....	.....	.....	.....	.....	.....
2	2,700	6,040	2,730	1,560	3,740	1,100	.....	.....	.....	.....	.....	.....
3	2,700	5,680	2,580	1,610	3,900	1,080	.....	.....	.....	.....	.....	.....
4	.....	5,360	2,320	1,820	4,180	1,020	.....	.....	.....	26,300	.....	.....
5	.....	4,910	2,180	3,340	3,950	980	.....	.....	.....	.....	.....	.....
6	.....	3,860	2,110	4,810	3,780	960	.....	.....	.....	.....	.....	.....
7	.....	3,300	2,040	5,730	3,700	900	.....	.....	.....	.....	.....	.....
8	.....	2,880	3,000	6,150	3,140	860	.....	.....	.....	.....	.....	.....
9	.....	2,700	4,220	6,100	2,700	800	.....	.....	.....	.....	.....	.....
10	.....	2,470	4,760	5,830	2,400	760	.....	.....	.....	16,300	.....	3,000
11	.....	2,400	4,960	5,620	2,180	740	.....	.....	.....	.....	.....	2,920
12	.....	2,320	4,860	5,160	2,000	608	.....	.....	.....	.....	.....	2,960
13	.....	2,280	4,760	5,010	1,880	590	.....	.....	.....	.....	.....	3,030
14	.....	2,250	4,400	4,960	1,760	572	.....	.....	.....	.....	.....	3,140
15	5,990	2,320	3,950	5,680	1,610	555	.....	.....	.....	.....	.....	3,110
16	6,850	2,960	3,460	6,960	1,500	520	.....	.....	.....	.....	.....	3,140
17	8,120	3,070	3,070	8,000	1,420	502	.....	.....	.....	.....	.....	3,070
18	8,000	3,220	2,700	8,240	1,360	485	.....	.....	.....	.....	.....	3,070
19	7,760	3,460	2,700	8,360	1,320	485	.....	.....	.....	.....	.....	2,920
20	7,400	3,860	2,470	8,000	1,260	468	.....	.....	.....	.....	.....	2,700
21	7,290	4,400	2,250	7,760	1,240	450	.....	.....	.....	.....	.....	2,920
22	6,740	4,360	2,080	7,240	2,220	432	.....	.....	.....	.....	.....	4,040
23	6,360	4,080	1,910	6,520	2,700	432	.....	.....	.....	.....	.....	5,880
24	5,060	3,950	1,790	4,810	2,180	450	.....	.....	.....	.....	.....	6,850
25	3,860	3,780	1,760	4,400	1,940	1,320	.....	.....	.....	.....	.....	7,070
26	4,130	3,380	1,670	3,620	1,560	1,040	.....	.....	.....	.....	.....	6,850
27	5,730	3,140	1,640	3,220	1,390	1,100	.....	.....	.....	.....	.....	6,800
28	7,340	3,000	1,670	3,070	1,260	760	.....	.....	.....	.....	.....	6,740
29	9,100	.....	1,670	3,000	1,220	1,240	.....	.....	.....	.....	.....	6,630
30	8,600	.....	1,670	3,000	1,220	940	.....	.....	.....	.....	.....	6,460
31	7,520	.....	1,670	.....	1,220	.....	.....	.....	.....	.....	.....	6,100

NOTE—Discharge interpolated for days of missing gage heights. Discharges estimated December 18–31, 1909, because of ice. No discharge given January 1–17, 1910, because of ice. Mean discharge January 4–14, 1911, estimated, because of ice, 2,240 second-feet, varying from 1,400 second-feet to 4,000 second-feet.

The daily and monthly discharges published here differ from those previously published in U. S. Geological Survey Water Supply Papers Nos. 245, 265 and 285, and in the report of the Internal Improvement Commission of Illinois on Surface Water, 1908–10, because of revising rating curve on account of discharge measurements made in 1911.

MONTHLY DISCHARGE OF SANGAMON RIVER NEAR OAKFORD, ILLINOIS, FOR 1909–11

[Drainage area, 5,000 square miles]

Month	Discharge in second-feet				Runoff—depth in inches on drainage area	Accuracy
	Maximum	Minimum	Mean	Per square mile		
1909						
October (26-31)	810	608	699	0.140	0.02	.....
November	4,860	658	2,240	.448	.50	.....
December	.....	.....	1,800	.360	.42	.....
1910						
January (17-31)	11,300	5,780	9,430	1.89	1.06	C.
February	4,910	1,390	2,690	.538	.56	B.
March	6,520	1,340	3,500	.700	.81	B.
April	1,700	1,130	1,370	.274	.31	A.
May	7,880	1,560	4,050	.810	.93	A.
June	7,120	1,080	2,410	.482	.54	A.
July	2,540	485	1,300	.260	.30	A.
August	900	240	542	.108	.12	A.
September	1,440	432	902	.180	.20	A.
October	940	310	557	.111	.13	A.
November	1,530	222	339	.068	.08	A.
December	2,700	310	736	.147	.17	B.
1911						
January	9,100	.....	4,800	.960	1.11	B.
February	6,960	2,250	3,660	.732	.76	A.
March	4,960	1,640	2,770	.554	.64	A.
April	8,360	1,560	5,040	1.01	1.13	A.
May	4,180	1,220	2,220	.444	.51	A.
June	1,320	432	777	.155	.17	A.
December (10-31)	7,070	2,700	4,520	.904	.74	A.

SANGAMON RIVER NEAR CHANDLERVILLE, ILLINOIS

Location.—At highway bridge about one mile west of Chandlerville, Ill., and about fifteen miles below the mouth of Crane Creek, the nearest important tributary.

Records available.—February 9 to December 31, 1908.

Drainage area.—Five thousand and ninety square miles.

Gage.—Vertical staff gage graduated to feet and tenths, fastened to downstream side of first pier from east end of bridge. Datum has remained unchanged.

Channel.—Sand and gravel; probably permanent.

Discharge measurements.—Made from downstream side of bridge.

Winter flow.—Ice may affect the relation between gage height and discharge during periods in December, January, and February.

Regulation.—None.

Accuracy.—Some of the flow at extreme high water passes around the section.

DISCHARGE MEASUREMENTS OF SANGAMON RIVER NEAR CHANDLERVILLE, ILLINOIS, IN 1908

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1908		*Feet*	*Sq.-ft.*	*Feet*	*Sec.-ft.*
July 30	R. J. Taylor	140	1,380	4.6	1,150
November 7	R. J. Taylor	110	872	2.17	368

DAILY GAGE HEIGHT, IN FEET, OF SANGAMON RIVER NEAR CHANDLERVILLE, ILLINOIS, FOR 1908

[Mrs. Frank Long, observer]

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1	.....	.....	13.5	10.3	13.0	13.0	5.8	4.1	3.0	2.0	2.2	2.2
2	.....	.....	13.5	10.2	12.9	12.7	5.9	4.0	3.3	2.0	2.2	2.2
3	.....	.....	13.3	10.0	12.7	12.2	6.0	3.9	3.3	1.9	2.2	2.2
4	.....	.....	13.25	10.1	12.8	11.5	6.2	3.8	3.0	1.9	2.2	2.2
5	.....	.....	13.3	10.2	13.0	11.0	6.4	3.7	2.9	1.9	2.2	2.2
6	.....	.....	13.2	10.1	13.5	10.6	6.1	3.7	2.8	1.9	2.2	2.2
7	.....	.....	13.2	10.1	14.2	10.2	6.1	3.6	2.5	1.9	2.2	2.2
8	.....	.....	13.2	10.2	14.8	10.0	6.3	3.5	2.5	1.9	2.2	2.2
9	.....	11.3	13.2	10.3	14.9	9.8	6.6	3.5	2.5	1.9	2.2	2.2
10	.....	11.5	13.1	10.6	15.1	9.5	6.9	3.5	2.5	1.9	2.2	2.2
11	.....	11.4	13.0	10.9	15.2	9.1	6.5	3.3	2.5	1.9	2.2	2.2
12	.....	11.25	13.0	11.0	15.5	9.0	6.1	3.2	2.4	1.9	2.2	2.2
13	.....	11.25	13.0	11.1	16.0	8.9	5.8	3.4	2.2	1.9	2.2	2.2
14	.....	11.7	13.0	11.0	16.3	8.9	5.6	3.3	2.2	1.9	2.2	2.2
15	.....	12.0	12.9	11.1	16.5	8.6	5.5	3.2	2.2	1.8	2.2	2.2
16	.....	12.2	12.8	11.0	16.5	8.2	5.5	3.2	2.2	1.8	2.2	2.2
17	.....	12.5	12.6	11.0	16.0	8.0	5.5	3.2	2.2	1.8	2.2	2.2
18	.....	12.9	12.5	11.2	15.2	7.7	5.4	3.1	2.2	1.8	2.2	2.2
19	.....	13.4	12.2	11.0	14.8	7.5	5.3	3.0	2.2	1.8	2.2	2.2
20	.....	13.3	11.8	10.8	14.4	7.4	5.3	3.0	2.0	1.8	2.2	2.2
21	.....	13.0	11.5	10.6	14.1	7.2	5.1	2.9	2.3	1.8	2.2	2.1
22	.....	12.8	11.25	10.3	14.1	7.1	5.0	2.9	2.0	1.8	2.2	2.1
23	.....	12.5	11.0	10.2	14.0	6.9	4.8	2.9	2.0	1.8	2.2	2.0
24	.....	12.3	10.8	10.2	13.8	6.7	4.8	2.8	2.0	1.8	2.3	2.0
25	.....	12.5	10.6	11.2	13.6	6.4	4.6	2.7	2.0	1.8	2.3	1.9
26	.....	12.6	10.5	12.0	13.4	6.2	4.5	2.7	2.0	2.1	2.3	1.9
27	.....	12.9	10.3	12.7	13.1	6.1	4.9	2.6	2.0	2.2	2.2	1.9
28	.....	13.0	10.1	13.0	13.0	6.0	5.0	2.6	2.0	2.2	2.2	1.9
29	.....	13.25	10.0	13.1	13.0	5.9	4.8	2.6	2.0	2.2	2.2	1.9
30	.....	.....	10.0	13.1	13.0	5.8	4.5	2.6	2.0	2.2	2.2	2.0
31	.....	.....	10.3	.....	13.0	.....	4.4	2.8	.....	2.2	.....	2.0

SOUTH FORK OF SANGAMON RIVER NEAR TAYLORVILLE, ILLINOIS

Location.—At the Wabash Railroad bridge about three and one-half miles southwest of Taylorville, about one-fourth mile upstream from the highway bridge known as the "Half Acre Bridge."

Records available.—February 11, 1908, to December 31, 1911.

Drainage area.—Four hundred and twenty-seven square miles.

Gage.—Standard chain gage attached to bridge. On September 2, 1909, the gage datum was lowered 2 feet. The gage heights to August 10, 1909, refer to the old datum; those from August 11 to September 1, 1909, are of no value because of backwater from a construction dam built and used during that period. From September 2, 1909, to date, the gage heights refer to the new datum.

Channel.—In August, 1909, a drainage ditch was dug along the river in this vicinity, straightening the course of the stream, but coinciding with the original channel at the gaging station. The cross-section of the channel was not changed at the measuring section, but the relation between gage height and discharge was considerably changed by the change in slope. The channel shifts to some extent but measurements to date indicate that the point of control is probably permanent.

Discharge measurements.—Made from the downstream side of the bridge.

Floods.—Maximum gage height since establishment of gage, 15.9 feet, occurred in September, 1911. No authentic record of floods prior to the establishment of the station is available.

Winter flow.—Ice may affect the relation between gage height and discharge during portions of December, January, and February.

DISCHARGE MEASUREMENTS OF SOUTH FORK OF SANGAMON RIVER NEAR TAYLORVILLE, ILLINOIS, IN 1908–11

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1908		*Feet*	*Sq.-ft.*	*Feet*	*Sec.-ft.*
March 25	R. J. Taylor	122	484	4.55	159
June 9	R. J. Taylor	85	345	3.3	88
1909					
February 8	R. J. Taylor	100	422	4.10	143
March 17	W. M. O'Neill	119	429	4.09	144
March 22	W. M. O'Neill	92	390	3.60	121
May 17	H. J. Jackson	122	462	4.57	214
*November 29	H. J. Jackson	59	237	3.98	95
*1910					
March 15	M. E. McChristie	66	275	4.91	154
March 15	M. E. McChristie	66	278	4.88	159
March 18	M. E. McChristie	64	248	4.66	133
May 12	H. J. Jackson	271	1,050	9.48	923
May 14	H. J. Jackson	273	1,240	9.97	1,220
May 17	H. J. Jackson	128	491	7.28	339
May 19	H. J. Jackson	86	351	6.02	262
May 20	H. J. Jackson	76	320	5.62	202
May 24	H. J. Jackson	274	1,260	10.14	1,260
July 19	H. J. Jackson	62	276	4.90	171
December 22	P. S. Monk	68	201	3.30	†58
1911					
March 18	P. S. Monk	66	278	5.31	184
October 7	Monk and Brown	281	1,340	10.33	1,360

* New channel caused by the construction of a drainage ditch coinciding with the natural channel at the bridge.

† Ice present.

DAILY GAGE HEIGHT, IN FEET, OF SOUTH FORK OF SANGAMON RIVER NEAR TAYLORVILLE, ILLINOIS, FOR 1908–11

[R. J. Hanon, observer]

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1	.....	.....	7.0	6.9	7.0	4.8	.....	1.1	1.1	0.6	0.6	1.2
2	.....	.....	7.6	6.7	6.3	4.7	.....	1.0	.9	.6	.6	1.2
3	.....	.....	8.2	7.2	6.6	4.6	.....	.9	.7	.5	.6	1.2
4	.....	.....	8.2	7.4	6.9	4.4	.....	.9	.7	.5	.6	1.3
5	.....	.....	7.8	7.0	11.2	.....	.....	.8	.6	.5	.6	1.1
6	.....	.....	7.9	6.7	12.8	.....	.....	.9	.7	.5	.6	1.1
7	.....	.....	8.0	6.8	12.4	3.3	.....	.9	.6	.5	.6	1.0
8	.....	.....	8.1	7.0	12.3	3.2	.....	.8	.6	.5	.6	1.0
9	.....	.....	8.5	7.0	12.1	3.3	.....	.8	.6	.5	.7	1.0
10	.....	.....	8.0	7.5	10.0	3.4	.....	.9	.6	.5	.7	1.0
11	.....	7.0	7.8	7.4	9.0	3.4	.....	.9	.6	.4	.7	1.0
12	.....	6.2	7.8	7.1	9.3	3.3	.....	.9	.5	.4	.7	1.0
13	.....	5.8	7.4	6.6	9.1	3.2	.....	.9	.5	.4	.8	1.0
14	.....	6.4	6.9	6.2	8.6	2.8	.....	.9	.5	.4	.8	.9
15	.....	7.0	6.4	5.8	.....	3.3	.....	.9	.5	.4	.8	.9
16	.....	9.3	6.0	5.5	.....	2.9	.....	.8	.5	.4	.8	.9
17	.....	8.9	5.8	5.1	.....	2.7	.....	.8	.5	.4	.8	1.0
18	.....	.....	5.4	4.9	.....	2.7	.....	.8	.5	.5	.8	1.0
19	.....	8.2	5.0	4.8	.....	2.5	.....	.8	.5	.5	.8	1.0
20	.....	7.7	5.3	4.8	.....	2.4	.....	.7	.4	.5	.8	1.0
21	.....	7.3	5.1	4.6	.....	2.5	.....	.7	.4	.6	.8	.9
22	.....	6.9	4.9	4.3	.....	2.3	.....	.6	.4	.6	.9	.9
23	.....	6.7	4.7	4.1	.....	2.2	.....	.6	.5	.7	1.1	.9
24	.....	6.7	4.6	6.9	8.9	2.0	.....	.6	.6	.7	1.2	.9
25	.....	7.6	4.5	7.7	8.1	1.9	.....	.5	.6	.8	1.3	.9
26	.....	9.9	4.5	8.0	7.7	1.8	.....	.5	.6	.9	1.1	.9
27	.....	10.3	4.1	8.3	6.9	1.8	.....	.5	.7	.9	1.1	.8
28	.....	9.5	4.2	8.2	6.8	1.6	.....	.4	.7	.8	.9	.8
29	.....	8.6	4.6	8.0	6.7	1.9	1.4	2.4	.6	.7	.9	1.4
30	.....	.....	4.6	7.6	.....	1.8	1.3	1.6	.6	.6	1.4	1.4
31	.....	.....	4.5	.....	4.8	.....	1.1	1.3	.....	.6	.....	1.3

DAILY GAGE HEIGHT, IN FEET, OF SOUTH FORK OF SANGAMON RIVER NEAR TAYLORVILLE, ILLINOIS, FOR 1908-11—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
1	1.3	1.5	6.5	3.25	4.45	6.45	6.15	3.0	.....	1.65	2.4	3.75
2	1.3	1.7	5.9	3.15	4.9	6.6	5.0	2.8	1.65	1.65	2.35	3.6
3	1.3	1.9	5.6	3.3	4.75	6.6	3.9	2.7	1.65	1.6	2.2	3.55
4	1.3	2.3	5.0	3.2	4.5	6.6	2.7	2.55	1.65	1.6	2.3	3.45
5	1.3	2.5	4.9	3.05	4.15	6.4	6.5	2.5	1.7	1.6	2.2	3.65
6	1.3	3.4	4.7	3.25	4.0	6.1	8.2	2.4	1.6	1.6	2.2	3.6
7	1.3	4.1	4.4	4.8	3.85	5.85	9.1	2.3	1.8	1.6	2.8	3.6
8	1.1	4.2	4.1	5.65	4.7	5.55	10.1	2.0	1.75	1.6	3.3	3.6
9	1.0	4.5	4.2	5.55	7.2	4.85	9.9	2.0	1.7	1.55	2.95	3.55
10	.9	4.2	4.6	4.85	7.85	5.2	9.3	1.9	1.7	1.55	3.7	3.5
11	.8	3.9	4.9	4.75	8.7	5.75	9.3	.....	1.65	1.55	3.42	3.5
12	.8	3.7	5.6	6.6	8.25	5.6	9.2	.....	1.65	1.6	3.35	3.95
13	.7	3.4	5.2	6.9	7.7	5.65	9.05	.....	1.65	1.55	4.5	4.65
14	.7	5.4	4.8	8.6	6.9	5.15	8.8	.....	1.65	1.5	6.2	6.75
15	.7	6.2	4.5	8.55	6.2	4.6	8.45	.....	2.0	.....	6.3	7.2
16	.8	6.4	4.1	8.55	5.1	4.25	8.15	.....	1.8	.....	6.5	6.75
17	.8	5.8	3.95	8.0	4.6	4.15	7.7	.....	1.75	.....	7.35	6.15
18	.9	6.3	3.85	7.15	4.15	3.9	6.05	.....	1.7	.....	7.2	5.75
19	.9	6.5	3.75	6.95	3.9	3.55	5.5	.....	1.7	.....	6.85	5.3
20	1.0	7.0	3.65	6.75	3.85	3.4	4.5	.....	1.65	3.65	6.0	5.15
21	1.4	7.95	3.55	8.25	3.75	3.0	4.35	.....	1.65	3.2	5.45	4.95
22	2.05	8.4	3.55	9.4	3.55	3.2	4.0	.....	1.65	3.1	5.4	4.85
23	3.0	8.6	3.7	10.0	3.4	2.9	3.85	.....	2.5	5.05	5.15	4.55
24	3.4	8.6	3.65	9.55	3.4	2.15	3.7	.....	2.65	4.2	4.85	4.45
25	3.5	8.6	3.6	8.25	5.1	2.45	3.65	.....	2.1	4.0	4.5	4.3
26	3.2	8.5	3.55	7.7	5.9	2.8	3.6	.....	1.75	3.95	4.3	4.0
27	1.6	8.0	3.75	6.65	6.9	3.2	3.55	.....	1.75	3.65	4.2	3.95
28	1.9	7.5	3.55	6.25	7.25	4.75	3.5	.....	1.7	3.15	4.1	3.95
29	2.0	.....	3.4	5.9	7.1	6.0	3.45	.....	1.7	3.0	3.95	3.95
30	2.1	.....	3.35	5.25	6.45	6.55	3.4	.....	1.65	2.85	3.9	3.95
31	1.9	.....	3.3	.....	6.5	.....	3.35	.....	.....	2.4	.....	3.95
1910												
1	4.25	4.5	10.95	3.8	3.05	7.05	.....	2.55	1.9	2.15	2.65	9.9
2	4.55	4.55	10.7	3.65	4.7	5.9	.....	2.5	2.0	2.9	2.5	9.5
3	4.75	4.95	10.25	3.4	7.85	5.7	.....	2.4	2.0	2.7	2.6	7.95
4	4.85	5.4	9.95	3.2	8.7	5.85	.....	2.35	2.1	3.8	2.45	5.85
5	4.95	5.5	9.6	3.9	8.8	6.0	.....	2.3	2.3	3.45	2.4	5.1
6	5.4	5.4	9.15	3.65	8.15	5.65	.....	2.2	4.05	4.55	2.65	4.7
7	5.0	5.2	9.0	3.3	7.95	5.2	.....	2.1	8.55	5.95	2.7	4.4
8	6.0	4.95	8.1	3.1	8.0	4.8	.....	2.2	8.5	6.95	2.7	3.9
9	6.2	4.7	7.75	3.05	8.4	4.9	.....	2.25	8.5	6.3	2.65	3.6
10	6.35	4.45	7.1	3.15	8.25	4.45	.....	2.2	8.55	4.85	2.7	4.1
11	6.85	4.2	6.8	3.3	9.15	4.0	.....	2.25	8.4	4.25	2.65	3.95
12	7.05	3.85	6.05	3.35	9.6	3.95	.....	2.05	7.05	3.8	2.7	4.1
13	8.0	3.8	5.5	3.9	10.2	3.8	.....	2.00	4.4	3.6	2.65	3.65
14	8.8	3.75	5.1	4.0	9.95	3.9	.....	1.95	3.6	3.45	2.7	3.5
15	9.7	3.65	4.95	4.1	9.05	3.8	.....	1.95	3.5	3.25	2.75	3.45
16	10.0	3.55	4.8	4.85	8.45	3.7	.....	1.9	3.05	3.2	2.65	3.5
17	10.1	3.7	4.75	5.95	7.4	3.7	.....	2.0	2.85	3.0	2.65	3.45
18	10.45	3.7	4.7	6.75	6.75	3.2	.....	3.7	2.75	3.05	2.7	3.45
19	10.7	3.9	4.55	7.95	5.85	3.2	5.1	4.6	2.65	3.0	2.7	3.45
20	11.0	3.95	4.6	6.6	5.4	3.2	4.3	5.35	2.6	2.85	2.65	3.2
21	10.85	4.2	4.7	5.9	6.85	3.1	3.85	5.45	2.55	2.8	2.7	3.25
22	10.25	4.25	4.65	4.95	8.4	3.1	3.6	6.8	2.5	2.85	2.65	3.25
23	9.35	3.9	4.5	3.9	10.25	3.1	3.4	7.35	2.45	3.0	2.7	2.9
24	8.65	3.8	4.45	3.65	9.9	3.05	3.25	5.85	2.7	2.95	2.65	2.95
25	7.3	3.85	4.3	3.5	11.0	3.1	3.1	3.95	2.85	2.85	2.6	3.15
26	6.75	4.2	4.2	3.15	10.85	3.2	3.0	2.95	3.2	2.95	2.65	3.15
27	6.35	8.9	4.05	3.0	10.3	3.5	2.9	2.45	3.95	2.85	6.25	3.15
28	6.0	10.0	4.0	3.4	9.45	3.45	2.8	2.25	3.25	2.8	7.95	6.8
29	5.45	.....	3.9	3.5	8.65	3.15	2.8	2.2	4.2	2.7	9.15	8.1
30	5.05	.....	3.9	3.2	8.0	3.0	2.9	2.15	3.55	2.65	9.9	8.7
31	4.95	.....	3.85	.....	7.6	.....	2.7	1.95	.....	2.75	.....	9.15
1911												
1	9.15	8.9	7.1	4.55	8.8	3.3	4.3	1.65	1.9	15.55	5.2	5.9
2	8.4	8.25	6.45	4.4	9.75	3.2	2.95	1.7	1.7	14.0	5.0	5.95
3	7.15	7.3	6.25	5.6	10.05	3.1	2.75	1.7	1.65	13.0	4.75	5.7
4	7.15	6.7	5.9	7.85	9.7	3.0	2.55	1.9	1.6	12.4	4.7	5.55
5	7.1	6.25	5.6	8.2	8.9	2.85	2.4	1.8	1.65	11.65	4.75	5.45
6	6.9	6.05	5.35	9.95	7.45	2.8	2.5	1.75	1.65	11.1	4.9	5.3
7	5.1	6.4	5.65	10.4	6.6	2.85	2.2	1.75	2.85	10.65	5.25	5.3
8	4.55	6.45	8.25	9.95	6.05	2.7	2.15	1.8	2.95	10.0	5.35	5.25
9	4.2	6.7	9.4	9.1	5.7	2.7	2.1	1.65	6.10	9.45	5.55	5.3
10	4.15	6.65	9.45	7.85	5.55	2.65	2.05	2.15	6.7	8.4	5.45	5.4
11	4.2	6.35	9.15	6.95	5.4	2.6	2.0	2.3	5.55	7.85	5.4	5.
12	4.7	5.85	8.25	6.55	5.15	2.5	1.95	2.9	3.55	7.1	8.1	6.
13	4.7	5.7	7.25	6.45	4.85	2.45	1.95	2.4	2.95	6.65	9.25	6.

DAILY GAGE HEIGHT, IN FEET, OF SOUTH FORK OF SANGAMON RIVER NEAR TAYLORVILLE, ILLINOIS, FOR 1908-11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1911												
14	10.2	5.65	6.55	10.15	4.65	2.4	2.0	2.0	6.15	6.2	9.7	6.15
15	13.5	6.0	6.2	11.65	4.45	2.4	1.9	1.8	7.05	6.0	9.8	5.9
16	12.5	6.45	5.8	11.4	4.3	2.4	1.85	1.7	8.35	5.85	9.7	5.9
17	13.55	6.6	5.35	10.5	4.2	2.4	1.8	1.6	9.1	5.6	9.25	5.85
18	10.25	7.5	5.4	9.9	4.15	3.7	1.75	1.6	9.3	5.45	9.2	5.95
19	9.5	8.2	5.3	9.15	4.1	3.6	1.75	1.6	9.1	5.2	9.85	6.15
20	7.9	8.95	5.0	9.15	4.05	2.7	1.8	1.5	8.4	5.1	9.5	6.5
21	6.85	8.85	4.95	7.4	3.95	2.5	1.8	1.55	7.05	5.05	9 4	7.0
22	7.15	8.55	4.7	6.8	5.0	2.4	1.75	1.5	5.6	5.35	8.95	9.85
23	7.1	8.15	4.55	5.95	4.4	2.3	1.75	1.5	4.75	6.45	8.15	9.9
24	5.9	7.55	4.4	5.2	3.95	2.5	1.75	2.4	4.15	6.35	7.35	9.85
25	5.45	7.4	4.3	5.55	3.7	2.5	1.85	3.15	4.8	7.4	6.75	8.3
26	5.9	7.7	4.3	5.4	3.55	5.2	1.8	3.6	7.8	6.8	6.35	7.5
27	7.8	8.45	4.7	5.25	3.45	5.8	1.7	2.9	8.75	6.05	6.25	7.65
28	7.9	8.15	5.35	5.4	3.35	4.8	1.7	2.45	9.85	5.75	6.0	7.95
29	8.85	.....	5.35	5.85	3.3	4.65	1.7	2.2	11.9	5.4	6.1	8.55
30	9.3	.....	5.05	6.2	3.25	4.3	1.7	1.95	15.9	5.25	6.0	7.95
31	9.3	.....	4.85	.....	3.2	.....	1.7	2.0	.....	5.2	.....	6.5

NOTE—Ice conditions existed January 3 to February 13, and December 8 to 31, 1909, during portions of January and February, 1910, December 13 to 17, 23 to 27, 1910, and January 3 to 12, 1911. Gage read to top of ice December 17 to 31, 1909, and January 4 to 10, 1911. Gage heights August 4 to September 1, 1909, are of no value because of the construction of a drainage ditch.

RATING TABLE FOR SOUTH FORK OF SANGAMON RIVER NEAR TAYLORVILLE, ILLINOIS, FROM FEBRUARY 11, 1908-AUGUST 9, 1909

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
0.40	5	3.60	108	6.80	597	10.00	2,195
0.50	5	3.70	116	6.90	645	10.10	2,245
0.60	6	3.80	124	7.00	695	10.20	2,295
0.70	6	3.90	132	7.10	745	10.30	2,345
0.80	6	4.00	140	7.20	795	10.40	2,395
0.90	7	4.10	148	7.30	845	10.50	2,445
1.00	7	4.20	157	7.40	895	10.60	2,495
1.10	8	4.30	166	7.50	945	10.70	2,545
1.20	9	4.40	176	7.60	995	10.80	2,595
1.30	10	4.50	186	7.70	1,045	10.90	2,645
1.40	12	4.60	197	7.80	1,095	11.00	2,695
1.50	14	4.70	208	7.90	1,145	11.10	2,745
1.60	16	4.80	220	8.00	1,195	11.20	2,795
1.70	18	4.90	232	8.10	1,245	11.30	2,845
1.80	20	5.00	244	8.20	1,295	11.40	2,895
1.90	22	5.10	256	8.30	1,345	11.50	2,945
2.00	24	5.20	269	8.40	1,395	11.60	2,995
2.10	27	5.30	282	8.50	1,445	11.70	3,045
2.20	30	5.40	296	8.60	1,495	11.80	3,095
2.30	33	5.50	310	8.70	1,545	11.90	3,145
2.40	37	5.60	324	8.80	1,595	12.00	3,195
2.50	41	5.70	339	8.90	1,645	12.10	3,245
2.60	45	5.80	354	9.00	1,695	12.20	3,295
2.70	50	5.90	370	9.10	1,745	12.30	3,345
2.80	55	6.00	386	9.20	1,795	12.40	3,395
2.90	60	6.10	403	9.30	1,845	12.50	3,445
3.00	66	6.20	422	9.40	1,895	12.60	3,495
3.10	72	6.30	443	9.50	1,945	12.70	3,545
3.20	79	6.40	466	9.60	1,995	12.80	3,595
3.30	86	6.50	492	9.70	2,045	12.90	3,645
3.40	93	6.60	520	9.80	2,095	13.00	3,695
3.50	100	6.70	555	9.90	2,145		

NOTE—The above table is not applicable for ice or obstructed channel conditions. It is based on nine discharge measurements made during 1908-09 and the discharge curve from September 2, 1909-December 31, 1911, and is well defined between gage heights 1.0 foot and 5.0 feet, and poorly defined above and below those limits. Above gage height 7.0 feet the rating curve is a tangent, the difference being 50 per tenth.

RATING TABLE FOR SOUTH FORK OF SANGAMON RIVER NEAR TAYLORVILLE, ILLINOIS, FROM SEPTEMBER 2, 1909–DECEMBER 31, 1911

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.50	5	4.90	154	8.30	509	11.70	2,045
1.60	7	5.00	161	8.40	530	11.80	2,095
1.70	9	5.10	169	8.50	553	11.90	2,145
1.80	11	5.20	177	8.60	578	12.00	2,195
1.90	13	5.30	185	8.70	606	12.10	2,245
2.00	15	5.40	193	8.80	638	12.20	2,295
2.10	18	5.50	201	8.90	674	12.30	2,345
2.20	21	5.60	209	9.00	714	12.40	2,395
2.30	24	5.70	217	9.10	758	12.50	2,445
2.40	27	5.80	225	9.20	805	12.60	2,495
2.50	30	5.90	234	9.30	853	12.70	2,545
2.60	34	6.00	243	9.40	901	12.80	2,595
2.70	38	6.10	252	9.50	950	12.90	2,645
2.80	42	6.20	261	9.60	999	13.00	2,695
2.90	46	6.30	270	9.70	1,048	13.10	2,745
3.00	50	6.40	279	9.80	1,097	13.20	2,795
3.10	54	6.50	288	9.90	1,146	13.30	2,845
3.20	58	6.60	297	10.00	1,195	13.40	2,895
3.30	62	6.70	306	10.10	1,245	13.50	2,945
3.40	67	6.80	315	10.20	1,295	13.60	2,995
3.50	72	6.90	324	10.30	1,345	13.70	3,045
3.60	77	7.00	333	10.40	1,395	13.80	3,095
3.70	82	7.10	343	10.50	1,445	13.90	3,145
3.80	87	7.20	353	10.60	1,495	14.00	3,195
3.90	92	7.30	363	10.70	1,545	14.10	3,245
4.00	97	7.40	374	10.80	1,595	14.20	3,295
4.10	103	7.50	385	10.90	1,645	14.30	3,345
4.20	109	7.60	397	11.00	1,695	14.40	3,395
4.30	115	7.70	410	11.10	1,745	14.50	3,445
4.40	121	7.80	424	11.20	1,795	14.60	3,495
4.50	127	7.90	439	11.30	1,845	14.70	3,545
4.60	133	8.00	455	11.40	1,895	14.80	3,595
4.70	140	8.10	472	11.50	1,945	14.90	3,645
4.80	147	8.20	490	11.60	1,995	15.00	3,695

NOTE—The above table is not applicable for ice or obstructed channel conditions. It is based on fourteen discharge measurements made during 1909-11, and is well defined between gage heights 3.2 feet and 10.5 feet. Above gage height 10 feet the rating curve is a tangent, the difference being 50 per tenth.

DAILY DISCHARGE, IN SECOND-FEET, OF SOUTH FORK OF SANGAMON RIVER NEAR TAYLORVILLE, ILLINOIS, FOR 1908–11

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1			695	645	695	220	19	8	8	6	6	9
2			995	555	443	208	19	7	7	6	6	9
3			1 300	795	520	197	19	7	6	5	6	9
3			1,300	895	645	176	19	7	6	5	6	10
5			1,100	695	2,800	146	19	6	6	5	6	8
6			1,140	555	3,600	116	19	7	6	5	6	8
7			1,200	597	3,400	86	19	7	6	5	6	7
8			1,240	695	3,340	79	19	6	6	5	6	7
9			1,440	695	3,240	86	19	6	6	5	6	7
10			1,200	945	2,200	93	19	7	6	5	6	7
11		695	1,100	895	1,700	93	19	7	6	5	6	7
12		422	1,100	745	1,840	86	19	7	5	5	6	7
13		354	895	520	1,740	79	19	7	5	5	6	7
14		466	645	422	1,500	55	19	7	5	5	6	7
15		695	466	354	1,510	86	19	7	5	5	6	7
16		1,840	386	310	1,530	60	19	6	5	5	6	7
17		1,640	354	256	1,540	50	19	6	5	5	6	7
18		1,470	296	232	1,560	50	19	6	5	5	6	7
19		1,300	244	220	1,570	41	19	6	5	5	6	7
20		1,040	282	220	1,580	37	19	6	5	5	6	7
21		845	256	197	1,600	41	19	6	5	6	6	7
22		645	232	166	1,610	33	19	6	5	6	7	7
23		555	208	148	1,630	30	19	6	5	6	8	7
24		555	197	645	1,640	24	19	6	6	6	9	7
25		995	186	1,040	1,240	22	19	5	6	6	10	7

DAILY DISCHARGE, IN SECOND-FEET, OF SOUTH FORK OF SANGAMON RIVER NEAR TAYLORVILLE, ILLINOIS, FOR 1908–11—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
26	.....	2,140	186	1,200	1,040	20	19	5	6	7	8	7
27	.....	2,340	148	1,340	645	20	19	5	6	7	8	6
28	.....	1,940	157	1,300	597	16	19	5	6	6	7	6
29	.....	1,500	197	1,200	555	22	12	37	6	6	7	12
30	.....	.....	197	995	388	20	10	16	6	6	12	12
31	.....	.....	186	.....	220	.....	8	10	.....	6	.....	10
1909												
1	10	10	492	82	181	479	412	66	8	8	27	84
2	10	15	370	76	232	520	244	55	8	8	26	77
3	10	22	324	86	214	520	132	50	8	7	21	74
4	10	33	244	79	186	520	50	43	8	7	24	69
5	8	41	232	69	152	466	492	41	9	7	21	79
6	8	93	208	82	140	403	1,300	37	7	7	21	77
7	8	148	176	220	128	362	1,740	33	11	7	42	77
8	6	157	148	332	208	317	2,240	24	10	7	62	70
9	5	186	157	317	795	226	2,140	24	9	6	94	60
10	5	157	197	226	1,120	269	1,840	22	9	6	82	50
11	4	132	232	214	1,540	346	1,840	20	8	6	68	60
12	4	116	324	520	1,320	324	1,800	20	8	7	64	94
13	4	93	269	645	1,040	332	1,720	20	8	6	127	136
14	4	296	220	1,500	645	262	1,600	20	8	5	261	310
15	4	422	186	1,470	422	197	1,420	20	15	8	270	353
16	5	466	148	1,470	256	162	1,270	20	11	12	288	310
17	5	354	136	1,200	197	152	1,040	20	10	20	368	235
18	7	443	128	770	152	132	394	20	9	30	353	200
19	7	492	120	670	132	104	310	20	9	40	320	170
20	7	695	112	676	128	93	186	20	8	80	243	150
21	12	1,170	104	1,320	120	66	171	20	8	58	197	130
22	26	1,400	104	1,900	104	79	140	20	8	54	193	110
23	66	1,500	116	2,200	93	60	128	20	30	165	173	90
24	93	1,500	112	1,970	93	28	116	20	36	109	150	80
25	100	1,500	108	1,320	256	39	112	20	18	97	127	75
26	79	1,440	104	1,040	370	55	108	20	10	94	115	70
27	16	1,200	120	538	645	79	104	20	10	80	109	70
28	22	945	104	432	820	214	100	20	9	56	103	65
29	24	.....	93	370	745	386	96	20	9	50	94	65
30	20	.....	90	276	479	506	93	20	8	44	92	60
31	15	.....	86	.....	492	.....	90	20	.....	27	.....	60
1910												
1	112	127	1,670	87	52	338	54	32	13	20	36	1,150
2	130	130	1,540	80	140	234	54	30	15	46	30	950
3	144	158	1,320	67	432	217	54	27	15	38	34	447
4	150	193	1,170	58	606	230	54	26	18	87	28	230
5	158	201	999	92	638	243	54	24	24	70	27	169
6	193	193	782	80	481	213	54	21	100	130	36	140
7	234	177	714	62	447	177	54	18	566	238	38	121
8	243	158	472	54	455	147	54	21	622	328	38	92
9	261	140	417	52	530	154	54	22	553	270	36	77
10	274	124	343	56	500	124	54	21	566	150	38	103
11	320	109	315	62	782	97	54	22	530	112	36	94
12	338	90	248	64	999	94	121	16	338	87	38	103
13	455	87	201	92	1,300	87	217	15	121	77	36	64
14	638	84	169	99	1,170	92	353	14	77	70	38	58
15	1,050	80	158	103	736	87	553	14	72	60	40	56
16	1,200	74	147	150	542	82	638	13	52	58	36	58
17	1,240	82	144	238	374	82	397	15	44	50	36	56
18	1,420	82	140	310	310	58	279	82	40	52	38	70
19	1,540	92	130	338	230	58	169	133	36	50	38	70
20	1,700	94	133	297	193	58	115	189	34	44	36	58
21	1,620	109	140	234	320	54	90	197	32	42	38	60
22	1,320	112	186	158	530	54	77	315	30	44	36	60
23	877	92	127	92	1,320	54	67	368	28	50	38	37
24	592	87	124	80	1,150	52	60	230	38	48	36	38
25	363	90	115	72	1,700	54	54	94	44	44	34	45
26	310	109	109	56	1,620	58	50	48	58	48	36	45
27	274	674	100	50	1,340	72	46	28	94	44	266	45
28	243	1,200	97	67	926	70	42	22	60	42	447	315
29	197	.....	92	72	592	56	42	21	109	38	782	472
30	165	.....	92	58	455	50	46	20	74	36	1,150	606
31	158	.....	90	.....	397	.....	38	14	.....	40	.....	782
1911												
1	782	674	343	130	638	62	115	8	13	3,970	177	234
2	530	500	284	121	1,070	58	48	9	9	3,200	161	238
3	.....	363	266	209	1,220	54	40	9	8	2,700	144	217
4	.....	306	234	432	1,050	50	32	13	7	2,400	140	205
5	.....	266	209	509	674	44	27	11	8	2,020	144	197
6	.....	248	189	1,170	380	42	30	10	8	1,740	154	185

DAILY DISCHARGE, IN SECOND-FEET, OF SOUTH FORK OF SANGAMON RIVER NEAR TAYLORVILLE, ILLINOIS, FOR 1908-11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
7	.....	279	213	1,400	297	44	21	10	44	1,520	181	185
8	.....	284	500	1,170	248	38	20	11	48	1,200	189	181
9	.....	306	901	758	217	38	18	8	252	926	205	185
10	.....	302	926	432	205	36	16	20	306	530	197	193
11	.....	274	782	328	193	34	15	24	205	432	193	234
12	.....	230	500	292	173	30	14	46	74	343	472	279
13	140	217	358	284	150	28	14	27	48	302	829	284
14	1,300	213	292	1,270	136	27	15	15	256	261	1,050	256
15	2,940	243	261	2,020	124	27	13	11	338	243	1,100	234
16	2,440	284	225	1,900	115	27	12	9	520	320	1,050	234
17	2,970	297	189	1,440	109	27	11	7	758	209	829	230
18	1,320	385	193	1,150	106	82	10	7	853	197	805	238
19	950	490	185	782	103	77	10	7	758	177	1,120	256
20	439	694	161	481	100	38	11	5	530	169	950	288
21	320	656	158	374	94	30	11	6	338	165	901	333
22	348	566	140	315	161	27	10	5	209	189	694	1,120
23	343	481	130	238	121	24	10	5	144	284	481	1,150
24	234	391	121	177	94	30	10	27	106	274	368	1,120
25	197	374	115	205	82	30	12	56	147	374	310	509
26	234	410	115	193	74	177	11	77	424	315	274	385
27	424	542	140	181	70	225	9	46	622	248	266	404
28	439	481	189	193	64	147	9	28	1,120	221	243	447
29	656	.....	189	230	62	136	9	21	2,140	193	252	566
30	853	.....	165	261	60	115	9	14	4,140	181	243	447
31	853	.....	150	.....	58	.....	9	15	.....	177	.....	288

NOTE—Discharges were estimated as follows:

1908. July 1–28, as equivalent to nineteen second-feet per day.

1909. January 5–17, because of ice; January 30–February 2, because of ice; August 11–31, as equivalent to twenty second-feet per day; October 15–19; December 8–11, because of ice.

1910. July 1–18, from known high water stage on July 16; December 13–17, because of ice, reduced twenty per cent; December 23–27, because of ice, reduced twenty per cent.

1911. January 3–12, because of ice, as 118 second-feet, varying from 40 to 300 second-feet.

The daily and monthly discharges published here differ from those previously published in U. S. Geological Survey Water Supply Papers Nos. 245, 265 and 285, and in the report of the Internal Improvement Commission of Illinois on Surface Water 1908-10, because of revising rating curve on account of discharge measurements made in 1911.

MONTHLY DISCHARGE OF SOUTH FORK OF SANGAMON RIVER NEAR TAYLORVILLE, ILLINOIS, FOR 1908–11

[Drainage area, 427 square miles]

Month	Discharge in second-feet				Runoff—depth in inches on drainage area	Accuracy
	Maximum	Minimum	Mean	Per square mile		
1908						
February (11-29)	2,340	.....	1,130	2.65	1.87	.....
March	1,440	148	630	1.42	1.64	.....
April	1,340	148	649	1.52	1.70	.....
May	3,600	220	1,550	3.63	4.18	.....
June	220	16	76.4	.179	.20	.....
July	.....	8	18.1	.042	.48	.....
August	37	5	7.7	.018	.021	.....
September	8	5	5.7	.013	.014	.....
October	7	5	5.5	.013	.015	.....
November	12	6	6.7	.016	.018	.....
December	12	6	7.7	.018	.021	.....
1909						
January	100	4	19.5	.015	.017	.....
February	1,500	10	537	1.26	1.31	.....
March	492	86	179	.419	.48	.....
April	2,200	69	736	1.72	1.92	.....
May	1,540	93	432	1.01	1.16	.....
June	520	28	257	.602	.67	.....

MONTHLY DISCHARGE OF SOUTH FORK OF SANGAMON RIVER NEAR TAYLORVILLE, ILLINOIS, FOR 1908-11
—*Concluded*

Month	Discharge in second-feet				Runoff—depth in inches on drainage area	Accuracy
	Maximum	Minimum	Mean	Per square mile		
1909						
July	2,240	50	755	1.77	2.04	.....
August	.....	.....	26.3	.062	.71	.....
September	36	7	10.9	.026	.029	.....
October	165	5	36.1	.084	.097	.....
November	368	21	138	.323	.36	.....
December	353	50	116	.272	.314	.....
The year	2,240	4	268	.628	8.47	.....
1910						
January	1,700	112	578	1.35	1.56	.....
February	1,200	74	177	.415	.43	.....
March	1,670	90	401	.939	1.08	.....
April	338	50	113	.265	.30	.....
May	1,770	52	686	1.61	1.86	.....
June	338	50	115	.269	.30	.....
July	638	38	131	.307	.35	.....
August	368	13	68.1	.160	.18	.....
September	622	13	147	.344	.38	.....
October	328	20	81.1	.190	.22	.....
November	1,150	27	38.2	.090	.10	.....
December	1,150	37	215	.504	.58	.....
The year	1,700	13	231	.541	7.34	.....
1911						
January	2,970	.....	642	1.50	1.73	C.
February	694	213	384	.899	.94	B.
March	926	115	285	.667	.77	A.
April	2,020	121	622	1.46	1.63	B.
May	1,220	58	266	.623	.72	A.
June	225	24	60.1	.141	.16	B.
July	115	9	19.4	.045	.05	C.
August	77	5	18.3	.043	.05	C.
September	4,140	7	481	1.13	1.26	C.
October	3,970	165	819	1.92	2.21	B.
November	1,120	140	471	1.10	1.23	C.
December	1,150	181	365	.855	.99	B.
The year	4,140	5	369	.864	11.74	.....

SALT CREEK NEAR KENNEY, ILLINOIS

Location.—At highway bridge about three miles west of Kenney, Ill., near the west boundary of T. 19 N., R. 1 E., about three-fourths mile below the Vandalia Railroad bridge.

Records available.—February 14, 1908, to December 31, 1911.

Drainage area.—Four hundred and fifty-nine square miles.

Gage.—Standard chain gage attached to the bridge; datum has remained unchanged since establishment.

Channel.—Section is at a pool; discharge measurements to date indicate that the point of control is not changing.

Discharge measurements.—Made from downstream side of bridge.

Floods.—The flood of 1882 is said to have been 1½ feet higher than that of 1908, or to have reached a height of 16 feet on the present gage.

Winter flow.—Ice affects the relation between gage height and discharge during portions of December, January, and February.

DISCHARGE MEASUREMENTS OF SALT CREEK NEAR KENNEY, ILLINOIS, IN 1908–11

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1908		*Feet*	*Square feet*	*Feet*	*Second-feet*
May 8	R. J. Taylor	157	1,280	10.5	3,240
July 28	R. J. Taylor	107	178	2.1	64
1909					
February 6	R. J. Taylor	102	119	1.91	27
March 19	W. M. O'Neill	109	258	2.89	201
May 19	H. J. Jackson	110	254	2.92	215
November 24	H. J. Jackson	111	265	3.17	236
1910					
March 9	M. E. McChristie	111	300	3.43	355
May 25	H. J. Jackson	112	344	3.96	438
May 25	H. J. Jackson	112	349	3.94	454
December 27	P. S. Monk	78	51.4	*1.25	10.7
1911					
March 22	P. S. Monk	103	170	2.36	119
October 12	Monk and Brown	110	298	3.83	383

* Ice present.

DAILY GAGE HEIGHT, IN FEET, OF SALT CREEK NEAR KENNEY, ILLINOIS, FOR 1908–11

[Chris McDermott, observer]

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1	.....	.....	5.9	3.4	5.6	4.6	2.8	1.9	1.6	1.5	1.9	1.9
2	.....	.....	6.6	3.6	5.2	4.2	2.8	1.8	1.6	1.5	1.9	1.8
3	.....	.....	7.0	3.3	4.8	4.0	2.6	1.8	1.6	1.5	1.8	1.8
4	.....	.....	7.0	3.2	8.0	4.0	2.4	1.9	1.6	1.6	1.8	1.8
5	.....	.....	7.1	3.4	9.0	3.8	2.3	1.9	1.6	1.6	1.8	1.8
6	.....	.....	7.7	3.3	10.7	3.9	2.4	1.9	1.6	1.6	1.8	1.8
7	.....	.....	7.8	3.7	10.1	3.7	2.4	1.9	1.6	1.5	1.8	1.8
8	.....	.....	7.1	4.2	10.7	3.6	2.3	1.8	1.6	1.6	1.8	1.8
9	.....	.....	6.6	4.6	11.6	3.3	2.2	1.8	1.6	1.5	1.7	1.8
10	.....	.....	6.0	4.8	10.5	3.2	2.1	1.9	1.5	1.5	1.8	1.8
11	.....	.....	5.0	4.7	9.8	3.2	2.1	1.9	1.6	1.5	1.9	1.7
12	.....	.....	5.2	4.4	13.0	3.0	2.1	1.9	1.6	1.5	1.7	1.7
13	.....	.....	4.9	4.0	15.0	2.9	2.0	2.0	1.7	1.5	1.9	1.7
14	.....	8.0	4.7	3.9	12.0	2.9	2.0	2.0	1.6	1.5	1.7	1.7
15	.....	9.1	4.6	4.9	12.7	3.0	2.1	1.9	1.5	1.5	1.7	1.7
16	.....	10.1	4.0	5.2	10.0	2.9	3.2	1.8	1.4	1.6	1.8	1.7
17	.....	9.1	3.9	4.9	8.7	2.8	2.6	1.9	1.4	1.7	1.8	1.7
18	.....	6.1	3.8	4.9	8.0	2.8	2.5	1.8	1.3	1.5	1.7	1.8
19	.....	4.2	4.2	4.6	8.6	2.9	2.2	1.8	1.4	1.8	1.8	1.7
20	.....	3.6	4.6	4.2	8.9	2.9	2.1	1.9	1.4	1.9	1.9	1.7
21	.....	4.0	4.4	4.0	8.0	2.8	2.1	1.8	1.4	1.9	1.8	1.7
22	.....	4.6	4.0	3.7	8.1	2.8	2.0	1.7	1.4	1.9	1.8	1.7
23	.....	4.6	4.0	3.2	7.0	2.8	3.4	1.7	1.4	1.8	1.8	1.7
24	.....	5.4	3.9	5.8	6.6	2.7	2.2	1.7	1.4	1.9	1.8	1.6
25	.....	7.4	3.8	7.0	5.9	2.6	2.0	1.6	1.4	1.8	1.8	1.7
26	.....	8.0	3.8	7.6	5.9	2.5	2.0	1.6	1.5	1.8	1.8	1.7
27	.....	8.3	3.4	7.6	5.6	2.4	3.8	1.6	1.7	1.8	1.8	1.8
28	.....	7.7	3.6	7.5	5.1	2.3	3.0	1.6	1.6	1.8	1.8	1.7
29	.....	6.8	3.5	6.8	5.5	2.7	2.2	1.7	1.5	1.8	1.8	1.9
30	.....	.....	3.3	6.0	5.3	2.8	2.0	1.6	1.5	1.8	1.8	2.3
31	.....	.....	3.3	.....	4.9	.....	1.9	1.6	.....	1.9	.....	2.1
1909												
1	1.9	2.1	4.8	2.5	6.0	3.1	2.2	2.0	1.45	1.45	1.5	2.4
2	1.8	2.1	4.6	2.5	5.25	2.9	2.1	1.95	1.4	1.3	1.9	2.4
3	1.8	2.1	4.2	2.5	4.7	2.9	2.05	1.9	1.7	1.35	1.85	2.3
4	1.8	2.1	4.0	2.45	4.2	2.85	1.95	1.85	1.65	1.35	1.75	2.3
5	1.8	2.0	3.8	2.4	3.9	2.8	2.5	1.85	1.5	1.4	1.75	2.3
6	1.7	2.0	3.7	2.45	3.75	3.1	2.8	1.8	1.45	1.35	1.75	2.25
7	1.7	2.1	3.5	3.1	3.5	2.9	5.75	1.75	1.5	1.35	1.75	2.3
8	1.7	2.2	3.4	3.55	3.3	2.7	6.25	1.7	1.45	1.3	1.65	1.95
9	1.7	3.0	3.7	3.3	3.9	3.8	6.0	1.7	1.4	1.3	1.4	2.1
10	1.6	3.7	3.9	3.0	4.6	4.9	5.2	1.65	1.4	1.4	1.75	2.15
11	1.6	3.2	3.9	2.8	4.7	5.0	4.3	1.6	1.4	1.3	1.65	2.15
12	1.6	3.0	3.7	2.75	4.35	4.15	6.6	1.6	1.3	1.35	2.8	2.2
13	1.7	2.7	3.6	5.1	4.0	4.3	7.25	1.5	1.3	1.3	3.0	2.5
14	1.7	4.0	3.5	5.75	3.8	5.45	5.3	1.55	1.5	1.45	2.6	2.8
15	1.7	5.5	3.3	5.15	3.65	5.4	4.8	1.55	1.3	1.4	2.35	3.1

DAILY GAGE HEIGHT, IN FEET, OF SALT CREEK NEAR KENNEY, ILLINOIS, FOR 1908-11—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
16	1.7	4.1	3.2	4.55	3.45	3.9	4.2	1.5	1.35	1.5	4.4	3.35
17	1.7	4.9	3.1	4.15	3.25	3.75	3.75	1.5	1.4	1.3	4.85	3.4
18	1.7	4.7	2.9	3.9	3.05	3.3	3.45	1.5	1.3	1.5	4.4	3.45
19	1.7	5.0	2.9	4.9	2.9	3.05	3.2	1.5	1.3	1.6	3.8	2.85
20	1.7	5.6	2.85	5.2	2.85	2.85	3.0	1.5	1.3	1.5	3.3	2.65
21	1.7	5.7	2.8	6.25	2.75	2.7	2.8	1.4	1.3	1.7	3.15	2.55
22	2.0	6.1	2.65	7.4	2.7	2.6	2.7	1.4	1.7	1.6	3.05	2.6
23	2.1	7.5	2.6	7.7	2.6	2.65	2.6	1.4	2.5	2.4	3.15	2.5
24	2.1	8.4	2.65	5.85	2.55	2.55	2.45	1.35	2.05	1.9	3.2	2.45
25	1.8	7.4	2.85	5.4	2.55	2.7	2.3	1.4	1.8	1.75	3.0	2.4
26	1.7	6.4	2.95	4.85	4.0	3.75	2.3	3.85	1.6	1.75	2.9	2.4
27	1.8	5.5	2.95	4.65	4.35	2.75	2.3	2.1	1.5	1.7	2.7	2.35
28	1.8	5.2	2.85	4.3	4.05	2.7	2.3	1.8	1.5	1.6	2.6	2.35
29	2.0	.....	2.8	4.05	3.7	2.4	2.2	1.6	1.5	1.55	2.5	2.4
30	2.1	.....	2.65	5.55	3.4	2.3	2.15	1.55	1.45	1.5	2.45	2.4
31	2.1	.....	2.55	.....	3.2	.....	2.1	1.45	.....	1.55	.....	2.4
1910												
1	2.35	3.0	5.5	2.15	2.35	2.75	1.65	1.45	1.2	1.45	1.35	1.6
2	2.35	3.5	4.4	2.1	2.35	2.5	1.6	1.4	1.2	1.4	1.3	1.5
3	2.5	3.6	3.7	2.15	2.9	2.4	1.6	1.3	1.2	1.35	1.3	1.3
4	2.5	3.6	3.7	2.15	2.75	2.35	1.55	1.25	1.3	1.8	1.25	1.3
5	2.45	3.5	3.8	2.45	2.6	2.3	1.5	1.25	1.25	2.5	1.3	1.4
6	2.4	3.3	3.9	2.35	2.45	2.2	1.5	1.2	1.3	2.4	1.25	1.4
7	2.3	3.25	3.95	2.25	2.45	2.2	1.5	1.2	2.05	2.3	1.25	1.3
8	2.25	3.2	3.65	2.15	2.65	2.1	1.5	1.2	1.8	2.1	1.3	1.35
9	2.25	3.1	3.45	2.15	2.7	2.05	1.45	1.2	1.95	2.0	1.3	1.3
10	2.2	2.85	3.2	2.1	2.75	2.0	1.45	1.2	1.9	1.85	1.3	1.2
11	2.2	2.7	3.15	2.05	2.8	2.0	1.4	1.2	1.75	1.8	1.3	1.15
12	2.3	2.95	3.0	2.05	2.95	1.9	1.4	1.2	1.65	1.7	1.35	1.2
13	3.7	2.4	2.95	2.05	2.85	1.85	2.0	1.15	1.6	1.65	1.25	1.2
14	5.6	2.7	2.85	2.0	2.7	1.8	1.9	1.15	1.5	1.6	1.3	1.2
15	5.8	2.8	2.7	2.05	2.55	1.8	1.9	1.15	1.5	1.55	1.25	1.15
16	5.55	2.6	2.85	2.05	2.45	1.75	2.05	1.2	1.45	1.5	1.35	1.2
17	5.2	2.4	2.6	2.25	2.45	1.75	1.7	3.6	1.35	1.5	1.3	1.25
18	7.6	2.4	2.55	2.25	2.4	1.7	1.6	2.2	1.3	1.45	1.4	1.3
19	7.65	2.6	2.5	2.2	2.3	1.7	1.5	1.7	1.3	1.4	1.2	1.3
20	8.1	2.45	2.45	2.2	2.35	1.65	1.5	1.8	1.25	1.35	1.25	1.2
21	8.85	2.5	2.45	2.2	2.35	1.6	1.45	1.6	1.25	1.4	1.25	1.3
22	8.8	2.5	2.4	2.15	2.3	1.6	1.45	1.6	1.15	1.4	1.25	1.3
23	8.05	2.7	2.35	2.15	3.75	1.6	1.35	1.5	1.2	1.35	1.3	1.2
24	6.9	2.65	2.35	2.15	3.95	1.55	1.3	1.4	1.45	1.35	1.35	1.15
25	6.1	2.2	2.25	2.15	3.75	1.5	1.3	1.35	1.6	1.4	1.35	1.20
26	5.4	2.3	2.25	2.2	3.65	1.5	1.25	1.35	1.65	1.6	1.3	1.25
27	5.15	5.7	2.3	2.55	3.15	2.05	1.25	1.3	1.6	1.45	1.6	1.25
28	4.35	6.1	2.3	2.7	2.8	1.85	2.2	1.25	1.55	1.4	1.75	4.0
29	4.1	.....	2.25	2.55	3.0	1.75	2.05	1.2	1.5	1.15	1.6	4.7
30	3.85	.....	2.2	2.45	3.0	1.7	1.6	1.2	1.45	1.15	1.65	4.0
31	3.65	.....	2.15	.....	3.0	.....	1.5	1.2	.....	1.25	.....	3.15
1911												
1	2.9	3.75	2.5	2.25	3.2	1.95	1.2	1.55	.95	7.1	2.8	3.9
2	2.85	3.5	2.4	2.2	3.2	1.85	1.15	1.3	.95	8.0	2.75	3.5
3	2.55	3.3	2.4	2.25	3.0	1.75	1.15	1.2	.95	7.9	2.6	3.45
4	2.5	3.2	2.3	2.8	2.85	1.75	1.15	1.0	.95	7.0	2.6	3.25
5	2.45	3.0	2.25	3.25	2.75	1.7	1.0	1.0	.95	6.7	2.6	3.1
6	2.25	2.8	2.2	3.6	2.6	1.7	1.1	1.0	.9	5.9	2.8	3.0
7	2.1	2.5	3.0	3.45	2.5	1.75	1.0	1.0	1.0	4.4	2.9	2.95
8	2.0	2.65	4.4	3.6	2.45	1.7	1.15	1.0	2.85	4.9	3.0	2.95
9	2.0	2.75	4.4	3.25	2.4	1.6	1.05	1.0	1.85	4.6	2.95	3.0
10	2.0	2.5	4.0	3.1	2.4	1.55	1.0	1.0	1.5	4.3	2.9	3.05
11	1.9	2.55	3.25	2.9	2.3	1.5	1.0	1.0	4.1	4.05	2.9	3.2
12	1.9	2.5	3.55	2.9	2.25	1.45	2.25	.95	5.6	3.85	4.95	3.35
13	1.9	2.45	3.35	3.7	2.2	1.35	1.8	.95	6.15	3.7	5.7	3.3
14	8.0	3.0	3.25	5.8	2.1	1.4	1.35	.95	3.7	3.5	5.4	3.2
15	8.2	4.0	3.25	6.0	2.0	1.35	1.2	.95	3.5	3.4	5.0	3.0
16	8.7	3.85	2.85	5.7	2.0	1.35	1.2	1.2	4.25	3.3	4.45	3.15
17	7.8	3.65	2.75	5.2	2.0	1.25	1.1	1.0	4.2	3.5	5.7	3.1
18	5.0	3.6	2.7	4.5	2.0	1.3	1.2	1.0	3.65	3.45	6.55	3.0
19	4.85	3.65	2.65	4.2	1.9	1.4	1.05	.95	3.65	3.25	6.45	2.85
20	4.75	3.7	2.5	4.0	1.9	1.4	1.0	1.0	3.6	3.0	6.1	2.85
21	5.0	3.4	2.4	4.0	2.2	1.3	1.0	1.0	3.1	3.0	5.35	3.6
22	4.8	3.3	2.5	3.9	2.0	1.3	1.0	1.0	2.95	3.25	4.8	4.7
23	4.65	3.2	2.25	3.6	2.0	1.3	1.0	1.0	2.5	3.8	4.6	5.7
24	4.05	2.85	2.2	3.3	1.9	1.35	1.0	1.1	2.45	3.7	4.3	5.5
25	4.1	2.8	2.15	3.1	1.85	1.5	1.0	1.0	9.7	3.5	4.1	5.05
26	6.2	2.75	2.25	3.0	1.75	1.45	1.05	1.2	9.7	3.3	3.9	4.7
27	9.5	2.55	2.6	3.0	1.7	1.5	1.1	1.1	9.0	3.2	3.75	5.2
28	7.2	2.55	2.5	2.95	1.7	1.35	1.0	1.0	8.2	3.0	4.2	4.85

DAILY GAGE HEIGHT, IN FEET, OF SALT CREEK NEAR KENNEY, ILLINOIS, FOR 1908–11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1911												
29	6.85	.....	2.45	3.05	2.1	1.3	1.0	1.0	9.1	2.9	3.8	4.4
30	5.25	.....	2.4	3.2	1.8	1.25	1.0	1.0	8.1	2.85	3.65	4.5
31	4.5	.....	2.3	.....	1.9	.....	1.0	1.0	.....	2.9	.....	4.3

NOTE—Ice conditions existed during January and December 7–31, 1909, January 1–27, February 17–28, December 11–16, December 21–27, and December 30 and 31, 1910, and January 1–26, 1911. Observer reported stream frozen over December 12, 1909, and ice eight inches thick on December 26, 1909. Ice was reported seven to ten inches thick January 10, 1911. Gage read to top of ice December 12–31, 1909, January 1–27, December 11–16, 20–27, and 30 and 31, 1910, and January 1–26, 1911.

RATING TABLE FOR SALT CREEK NEAR KENNEY, ILLINOIS, FROM FEBRUARY 14, 1908–DECEMBER 31, 1911

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
0.90	1	4.60	614	8.10	1,988	11.70	3,926
1.00	3	4.60	645	8.20	2,046	11.80	3,984
1.10	6	4.70	676	8.30	2,094	11.90	4,042
1.20	10	4.80	707	8.40	2,142	12.00	4,100
1.30	14	4.90	738	8.50	2,190	12.10	4,158
1.40	19	5.00	770	8.60	2,238	12.20	4,216
1.50	25	5.10	802	8.70	2,286	12.30	4,274
1.60	32	5.20	834	8.80	2,334	12.40	4,332
1.70	40	5.30	867	8.90	2,382	12.50	4,390
1.80	49	5.40	900	9.00	2,430	12.60	4,448
1.90	59	5.50	933	9.10	2,480	12.70	4,506
2.00	70	5.60	966	9.20	2,530	12.80	4,564
2.10	82	5.70	999	9.30	2,582	12.90	4,622
2.20	95	5.80	1,032	9.40	2,634	13.00	4,680
2.30	108	5.90	1,066	9.50	2,686	13.10	4,738
2.40	122	6.00	1,100	9.60	2,740	13.20	4,796
2.50	137	6.10	1,136	9.70	2,794	13.30	4,854
2.60	153	6.20	1,172	9.80	2,848	13.40	4,912
2.70	170	6.30	1,210	9.90	2,904	13.50	4,970
2.80	188	6.40	1,248	10.00	2,960	13.60	5,028
2.90	206	6.50	1,286	10.10	3,016	13.70	5,086
3.00	225	6.60	1,326	10.20	3,072	13.80	5,144
3.10	245	6.70	1,366	10.30	3,128	13.90	5,202
3.20	266	6.80	1,406	10.40	3,184	14.00	5,260
3.30	288	6.90	1,448	10.50	3,240	14.10	5,318
3.40	311	7.00	1,490	10.60	3,296	14.20	5,376
3.50	335	7.10	1,534	10.70	3,352	14.30	5,434
3.60	360	7.20	1,578	10.80	3,408	14.40	5,492
3.70	386	7.30	1,622	10.90	3,464	14.50	5,550
3.80	412	7.40	1,668	11.00	3,520	14.60	5,608
3.90	439	7.50	1,714	11.10	3,578	17.70	5,666
4.00	467	7.60	1,760	11.20	3,636	14.80	5,724
4.10	495	7.70	1,806	11.30	3,694	14.90	5,782
4.20	524	7.80	1,854	11.40	3,752	15.00	5,840
4.30	554	7.90	1,902	11.50	3,810		
4.40	584	8.00	1,950	11.60	3,868		

NOTE—The above table is not applicable for ice or osbtructed channel conditions. It is based on discharge measurements made during 1908–11, and is fairly well defined between gage heights 1.2 feet and 4.0 feet. Above 4.0 feet the rating depends on one measurement at 10.5 feet.

DAILY DISCHARGE, IN SECOND-FEET, OF SALT CREEK NEAR KENNEY, ILLINOIS, FOR 1908–11

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1	.....	.....	1,070	311	966	645	188	59	32	25	59	59
2	.....	.....	1,330	360	834	524	188	49	32	25	59	49
3	.....	.....	1,490	288	707	467	153	49	32	25	49	49
4	.....	.....	1,490	266	1,950	467	122	59	32	32	49	49
5	.....	.....	1,530	311	2,430	412	108	59	32	32	49	49

DAILY DISCHARGE, IN SECOND-FEET, OF SALT CREEK NEAR KENNEY, ILLINOIS, FOR 1908–11—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
6	.....	.....	1,810	288	3,350	439	122	59	32	32	49	49
7	.....	.....	1,850	386	3,020	386	122	59	32	25	49	49
8	.....	.....	1,536	524	3,350	360	108	49	32	32	49	49
9	.....	.....	1,330	645	3,870	288	95	49	32	25	40	49
10	.....	.....	1,100	707	3,240	266	82	59	25	25	49	49
11	.....	.....	770	676	2,850	266	82	59	32	25	59	40
12	.....	.....	834	584	4,680	225	82	59	32	25	40	40
13	.....	.....	738	467	5,840	206	70	70	40	25	59	40
14	.....	1,950	676	439	4,100	206	70	70	32	25	40	40
15	.....	2,480	645	738	4,510	225	82	59	25	25	40	40
16	.....	3,020	467	834	2,960	206	266	49	19	32	49	40
17	.....	2,480	439	738	2,290	188	153	59	19	40	49	40
18	.....	1,140	412	738	1,950	188	137	49	14	25	40	49
19	.....	524	524	645	2,240	206	95	49	19	49	49	40
20	.....	360	645	524	2,380	206	82	59	19	59	59	40
21	.....	467	584	467	1,950	188	82	49	19	59	49	40
22	.....	645	467	386	2,000	188	70	40	19	59	49	40
23	.....	707	467	266	1,490	188	311	40	19	49	49	40
24	.....	900	439	1,030	1,330	170	95	40	19	59	49	32
25	.....	1,670	412	1,490	1,070	153	70	32	19	49	49	40
26	.....	1,950	412	1,760	1,070	137	70	32	25	49	49	40
27	.....	2,090	311	1,760	966	122	412	32	40	49	49	49
28	.....	1,810	360	1,710	802	108	225	32	32	49	49	40
29	.....	1,410	335	1,410	933	170	95	40	25	49	49	59
30	.....	.....	288	1,100	867	188	70	32	25	49	49	108
31	.....	.....	288	.....	738	.....	59	32	.....	59	49	82
1909												
1	59	82	707	137	1,100	245	95	70	22	22	25	122
2	49	82	645	137	850	206	82	64	19	14	59	122
3	49	82	524	137	676	206	76	59	40	16	54	108
4	49	82	467	130	524	197	64	54	36	16	44	108
5	49	70	412	122	439	188	137	54	25	19	44	108
6	32	70	386	130	399	245	188	49	22	16	44	102
7	32	82	335	245	335	206	1,020	44	25	16	44	108
8	32	95	311	348	288	170	1,190	40	22	14	36	64
9	32	225	386	288	439	412	1,100	40	19	14	19	82
10	25	386	439	225	645	738	834	36	19	19	44	88
11	25	266	439	188	676	770	554	32	19	14	36	88
12	25	225	386	179	569	510	1,330	32	14	16	188	75
13	32	170	360	802	467	554	1,600	25	14	14	225	110
14	32	467	335	1,020	412	916	867	28	25	22	153	130
15	32	933	288	818	373	900	707	28	14	19	115	175
16	32	495	266	630	323	439	524	25	16	25	584	210
17	32	738	245	510	277	399	399	25	19	14	722	220
18	32	676	206	439	235	288	323	25	14	25	584	230
19	40	770	206	738	206	235	266	25	14	32	412	140
20	40	966	197	834	197	197	225	25	14	25	288	115
21	40	999	188	1,190	179	170	188	19	14	40	256	100
22	70	1,140	162	1,670	170	153	170	19	40	32	235	105
23	82	1,710	153	1,810	153	162	153	19	137	122	258	95
24	82	2,140	162	1,050	145	145	130	16	76	59	266	90
25	49	1,670	197	900	145	170	108	19	49	44	225	85
26	40	1,250	216	722	467	399	108	426	32	44	206	85
27	49	933	216	660	569	179	108	82	25	40	170	80
28	49	834	197	554	481	170	108	49	25	32	153	80
29	70	.....	188	481	386	122	95	32	25	28	137	75
30	82	.....	162	950	311	108	88	28	22	25	130	75
31	82	.....	162	.....	266	.....	82	22	.....	28	.....	75
1910												
1	10	225	933	88	115	179	36	22	10	22	16	32
2	10	335	584	82	115	137	32	19	10	19	14	25
3	9	360	386	88	206	122	32	14	10	16	14	14
4	9	360	386	88	179	115	28	12	14	49	12	14
5	9	335	412	130	153	108	25	12	12	137	14	19
6	8	288	439	115	130	95	25	10	14	122	12	19
7	8	277	453	102	130	95	25	10	76	108	12	14
8	9	266	373	88	162	82	25	10	49	82	14	16
9	8	245	323	88	170	76	22	10	64	70	14	14
10	9	197	266	82	179	70	22	10	59	54	14	10
11	50	170	256	76	188	70	19	10	44	49	14	9
12	60	216	225	76	216	59	19	10	36	40	16	9
13	200	122	216	76	197	54	70	8	32	36	12	9
14	500	170	197	70	170	49	59	8	25	32	14	9
15	700	188	170	76	145	49	59	8	25	28	12	9
16	600	153	197	76	130	44	76	10	22	25	16	10
17	600	60	153	102	130	44	40	360	16	25	14	12
18	1,000	30	145	102	122	40	32	95	14	22	19	14

DAILY DISCHARGE, IN SECOND-FEET, OF SALT CREEK NEAR KENNEY, ILLINOIS, FOR 1909–11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1910												
19	1,000	35	137	95	108	40	25	40	14	19	10	14
20	1,500	50	130	95	115	36	25	49	12	16	12	10
21	2,000	60	130	95	115	32	22	32	12	19	12	11
22	1,800	45	122	88	108	32	22	32	8	19	12	11
23	1,500	20	115	88	399	32	16	25	10	16	14	11
24	1,300	20	115	88	453	28	14	19	22	16	16	10
25	1,000	20	102	88	399	25	14	16	32	19	16	10
26	600	25	102	95	373	25	12	16	36	32	14	11
27	600	500	108	145	256	76	12	14	32	22	32	11
28	569	700	108	170	188	54	95	12	28	19	44	467
29	495	.....	102	145	225	44	76	10	25	8	32	676
30	426	.....	95	130	225	40	32	10	22	8	36	220
31	373	.....	88	.....	225	.....	25	10	.....	12	.....	150
1911												
1	208	399	137	102	266	64	10	28	2	1,530	188	439
2	197	335	122	95	266	54	8	14	2	1,950	179	335
3	145	288	122	102	225	44	8	10	2	1,900	153	323
4	.....	266	108	188	197	44	8	3	2	1,490	153	277
5	.....	225	102	277	179	40	3	3	2	1,370	153	245
6	.....	188	95	360	153	40	6	3	1	1,070	188	225
7	.....	137	225	323	137	44	3	3	3	584	206	216
8	.....	162	584	360	130	40	8	3	197	738	225	216
9	.....	179	584	277	122	32	4.5	3	54	645	216	225
10	.....	137	467	245	122	28	3	3	25	554	206	235
11	.....	145	277	206	108	25	3	3	495	481	206	266
12	.....	137	348	206	102	22	102	2	966	426	754	300
13	.....	130	300	386	95	16	49	2	1,150	381	999	288
14	1,950	225	277	1,030	82	19	16	2	386	335	900	266
15	2,050	467	277	1,100	70	16	10	2	335	311	770	225
16	2,290	426	197	999	70	16	10	10	539	288	599	256
17	1,850	373	179	834	70	12	6	3	524	335	999	245
18	770	360	170	614	70	14	10	3	373	323	1,310	225
19	722	373	162	524	59	19	4.5	2	373	277	1,270	197
20	692	386	137	467	59	19	3	3	360	225	1,140	197
21	770	311	122	467	95	14	3	3	245	225	884	360
22	707	288	137	439	70	14	3	3	216	277	707	676
23	660	266	102	360	70	14	3	3	137	412	645	999
24	481	197	95	288	59	16	3	6	130	386	554	933
25	495	188	88	245	54	25	3	3	2,790	335	495	786
26	1,170	179	102	225	44	22	4.5	10	2,790	288	439	676
27	2,690	145	153	225	40	25	6	6	2,430	266	399	834
28	1,580	145	137	216	40	16	3	3	2,050	225	524	722
29	1,430	.....	130	235	82	14	3	3	2,480	206	412	584
30	850	.....	122	266	49	12	3	3	2,000	197	373	614
31	614	.....	108	.....	59	.....	3	3	.....	206	.....	554

NOTE—Recent measurements appear to indicate that some of the early low-water discharge measurements are not reliable.

Daily discharge January 6–18, and December 7–31, 1909; January 1–27, February 17–28, and December 21–27, and 30 and 31, 1910; and January 4–13, 1911, estimated, because of ice conditions, from climatological records, discharge of adjacent drainage areas, and observer's notes.

Mean discharge January 4–13, 1911, estimated about 62 second-feet, varying from about 45–100 second-feet.

The daily and monthly discharges published here differ from those previously published in United States Geological Survey Water Supply Papers Nos. 245, 265 and 285; and in the report of the Internal Improvement Commission of Illinois on Surface Water, 1908–10, because of revising curve on account of discharge measurements made in 1911.

MONTHLY DISCHARGE OF SALT CREEK NEAR KENNEY, ILLINOIS, FOR 1908–11

[Drainage area, 459 square miles]

Month	Discharge in second-feet				Runoff—depth in inches on drainage area	Accuracy
	Maximum	Minimum	Mean	Per square mile		
1908						
February (14–29)	3,020	360	1,480	3.22	1.92	B.
March	1,850	288	808	1.76	2.03	B.
April	1,760	266	728	1.59	1.77	B.
May	5,840	707	2,250	4.90	5.65	B.

MONTHLY DISCHARGE OF SALT CREEK NEAR KENNEY, ILLINOIS, FOR 1908-11—*Concluded*

Month	Discharge in second-feet				Runoff—Depth in inches on drainage area	Accuracy
	Maximum	Minimum	Mean	Per square mile		
1908						
June	645	108	210	.457	.51	A.
July	412	59	121	.264	.30	A.
August	70	32	49.5	.108	.12	B.
September	40	14	26.9	.058	.06	C.
October	59	25	38.3	.083	.10	B.
November	59	40	49.2	.107	.12	B.
December	108	32	47.7	.104	.12	B.
1909						
January	82	25	46.0	.100	.12	C.
February	2,140	70	630	1.57	1.64	B.
March	707	153	308	.672	.77	B.
April	1,810	122	601	1.31	1.45	B.
May	1,100	145	410	.893	1.03	A.
June	916	108	327	.712	.79	A.
July	1,600	64	423	.922	1.06	B.
August	426	16	48.7	.106	.12	C.
September	137	14	28.6	.062	.07	C.
October	122	14	27.9	.061	.07	C.
November	722	19	192	.418	.47	B.
December	230	75	111	.242	.28	C.
The year	2,140	14	259	0.564	7.87	
1910						
January	2,000	8	547	1.19	1.37	D.
February	360	20	195	.425	.44	B.
March	933	88	244	.532	.61	B.
April	170	70	97.6	.212	.24	B.
May	453	108	194	.423	.49	B.
June	179	26	65.1	.142	.16	B.
July	95	12	33.4	.073	.08	B.
August	360	8	29.8	.065	.07	B.
September	64	8	26.2	.057	.07	C.
October	137	8	37.5	.082	.09	C.
November	44	10	16.8	.037	.04	C.
December	676	9	60.3	.131	.15	D.
The year	2,000	8	129	0.281	3.81	
1911						
January	2,690	.....	740	1.61	1.86	C.
February	467	130	252	.549	.57	A.
March	584	88	199	.434	.50	A.
April	1,100	95	389	.847	.94	A.
May	266	40	105	.229	.26	C.
June	64	12	26	.057	.06	C.
July	102	3	10.1	.022	.03	C.
August	28	2	4.9	.011	.01	D.
September	2,790	1	703	1.53	1.71	B.
October	1,950	197	588	1.28	1.48	B.
November	1,310	153	542	1.18	1.32	A.
December	999	197	417	.908	1.05	A.
The year	2,790	.....	331	0.721	9.79	

CAHOKIA CREEK DRAINAGE BASIN

GENERAL FEATURES

The drainage area of Cahokia Creek lies in the southwestern part of the State of Illinois. The creek rises in the southern part of and about on line between Montgomery and Macoupin counties, flows in a southwesterly direction diagonally across the southeast corner of Macoupin County and the northwest portion of Madison County, past Edwardsville, through East St. Louis, Ill., and empties into Mississippi River.

The creek is very crooked and its length is approximately 55 miles. Its basin is about 45 miles long, has an average width of about 8 miles and a maximum width of about 12 miles, and comprises 360 square miles. Its principal tributary is Indian Creek, which enters from the right bank about three-fourths of a mile north of the Wabash Railroad bridge near Poag, Ill. The area drained is low, level, or undulating, and is crossed by a chain of bluffs just north of Poag, Ill. The sources of the creek are about 680 feet, and the mouth is about 385 feet above sea level.

The basin contains no forested areas. The mean annual rainfall is about 40 inches. In general the winters are mild. The opportunities for storage and water-power development have not been investigated but are undoubtedly not worthy of consideration. Flood control, especially in its relation to the proposed flood protection works of the East Side Levee and Sanitary District of East St. Louis, Ill., is the most important problem under consideration at present in connection with this drainage basin.

CAHOKIA CREEK NEAR POAG, ILLINOIS

Location.—At the Wabash Railroad bridge about three-fourths mile northeast of the Wabash Railroad Station at Poag, Ill.

Records available.—December 13, 1909, to December 31, 1911.

Drainage area.—Two hundred and fifty-nine square miles.

Gage.—Standard chain gage fastened to bridge; datum unchanged.

Channel.—Probably permanent.

Discharge measurements.—Made from downstream side of bridge.

Floods.—Maximum gage height since establishment of gage 19.0 feet (discharge estimated about 3,600 second-feet), occurred in October, 1911. See footnotes to tables of daily gage height and daily discharge. No record of floods prior to the establishment of the gage is available.

Winter flow.—Ice may affect the relation between gage height and discharge during short periods in December, January, and February.

Remarks.—The data collected are being used by the East Side Levee and Sanitary District of East St. Louis, Ill., in its study for flood control and prevention at that place. Cahokia Creek will soon be diverted west into the Mississippi River north of East St. Louis instead of flowing into the river south of East St. Louis.

DISCHARGE MEASUREMENTS OF CAHOKIA CREEK NEAR POAG, ILLINOIS, IN 1910-11

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1910		*Feet*	*Square feet*	*Feet*	*Second-feet*
March 21	Jackson and McChristie	48	108	3.43	50
March 24	H. J. Jackson	47	101	3.33	46
April 13	H. J. Jackson	47	96	3.10	44
May 3	Morgan and Livingston	89	716	12.45	1,100
May 24	W. H. Morgan	115	847	13.53	1,320
September 6	W. H. Morgan	96	772	12.70	1,030
September 7	W. H. Morgan	73	491	9.30	530
September 8	W. H. Morgan	63	310	7.08	256
September 9	W. H. Morgan	60	216	5.32	132
October 7	W. H. Morgan	247	1,730	16.25	*2,890
December 9	Bailey and Monk	45	82.5	2.99	†10

DISCHARGE MEASUREMENTS OF CAHOKIA CREEK NEAR POAG, ILLINOIS, IN 1910–11—*Concluded*

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1911		*Feet*	*Square feet*	*Feet*	*Second-feet*
March 15	P. S. Monk	51	131	4.22	74
October 18	Monk and Brown	47	94.4	3.13	39.5

* Includes 574 second-feet in flood channel.
† Ice present.

DAILY GAGE HEIGHT, IN FEET, OF CAHOKIA CREEK NEAR POAG, ILLINOIS, FOR 1909–11

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												12.0
14												11.0
15												8.5
16												7.0
17												6.2
18												5.0
19												3.6
20												3.0
21												2.8
22												2.3
23												2.1
24												2.0
25												1.9
26												1.9
27												1.9
28												1.8
29												1.8
30												1.7
31												2.0
1910												
1	2.5	2.3	16.6	2.9	3.3	4.2	2.4	2.4	6.0	3.7	3.35	5.95
2	3.2	2.3	14.5	2.8	8.8	3.5	2.3	2.3	3.2	3.3	3.4	5.1
3	3.6	4.0	12.3	3.1	12.8	3.4	3.7	2.3	2.3	2.95	3.6	4.15
4	4.0	5.0	9.0	3.2	10.3	12.1	3.0	2.2	13.0	5.3	3.85	4.2
5	5.0	4.2	6.6	6.4	6.1	13.2	2.8	2.1	13.7	12.0	3.8	4.0
6	6.0	3.8	5.0	5.8	5.0	9.5	2.7	2.1	12.4	15.0	3.65	3.65
7	5.2	3.3	4.3	4.2	6.5	5.6	2.6	2.0	9.7	16.0	3.7	3.3
8	4.2	3.1	4.2	3.6	7.7	4.0	2.5	2.0	7.4	16.3	3.65	3.15
9	3.5	3.0	3.9	3.3	6.1	6.7	2.4	1.9	5.0	11.0	3.7	3.0
10	3.2	2.8	3.6	3.2	5.0	5.0	3.0	1.8	4.2	8.15	3.6	2.9
11	3.0	2.6	3.4	3.0	7.9	4.4	3.8	1.8	3.4	5.6	3.55	2.9
12	8.0	2.4	3.2	3.1	8.5	4.0	4.0	1.7	3.2	4.95	3.6	2.8
13	16.0	2.3	3.1	3.1	7.1	3.6	3.2	1.7	3.0	4.6	3.85	2.8
14	16.4	2.2	3.0	2.9	5.6	4.1	2.8	1.6	2.9	4.4	3.9	2.8
15	16.1	5.0	3.0	3.5	4.2	5.4	2.6	1.6	2.8	4.15	3.9	2.6
16	15.0	4.0	2.9	7.5	4.0	6.3	11.6	1.5	2.7	4.1	3.85	2.6
17	12.0	3.5	2.9	11.1	4.0	4.2	9.0	1.5	2.6	3.95	3.8	2.6
18	13.5	3.4	2.8	6.6	4.2	3.7	6.4	1.4	2.5	3.9	3.75	2.6
19	13.7	3.3	2.8	5.5	3.8	3.4	4.0	1.4	2.4	3.8	3.8	2.5
20	11.4	3.2	2.7	4.5	3.5	3.2	3.2	1.3	2.3	3.65	3.7	2.5
21	6.0	3.0	3.4	4.1	3.2	3.0	2.1	1.3	2.15	3.6	3.75	2.5
22	4.0	2.9	3.3	3.9	3.0	2.8	2.0	1.2	2.2	3.95	3.8	2.4
23	3.1	2.8	3.3	3.7	13.5	2.6	1.9	1.9	2.1	3.9	3.8	2.4
24	3.0	2.7	3.3	3.5	13.3	2.4	1.8	2.8	2.35	3.8	3.75	3.0
25	3.0	2.6	3.2	3.4	13.2	3.5	2.0	2.4	3.6	3.65	4.0	3.4
26	2.9	4.0	3.2	3.5	8.2	3.0	4.0	2.2	8.15	3.7	4.05	3.2
27	2.8	11.8	3.2	4.5	5.0	4.0	2.8	2.0	14.0	3.55	4.9	3.0
28	2.7	12.9	3.1	4.1	4.5	4.2	3.0	1.8	10.2	3.6	5.55	3.4
29	2.6		3.1	3.7	4.0	3.2	2.8	1.6	5.95	3.5	6.9	6.8
30	2.5		3.1	3.4	7.4	2.8	2.6	1.4	4.3	3.45	6.8	6.4
31	2.4		3.0		4.5		2.5	1.3		3.4		6.0

DAILY GAGE HEIGHT, IN FEET, OF CAHOKIA CREEK NEAR POAG, ILLINOIS, FOR 1909-11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1911												
1	6.0	4.2	6.2	3.6	15.9	2.2	2.5	1.8	3.2	8.2	3.4	4.8
2	6.8	4.0	5.0	3.5	16.0	2.2	2.4	1.7	3.1	14.6	3.3	4.5
3	7.0	3.7	4.2	4.2	14.0	2.1	2.3	1.6	3.0	19.0	3.2	4.3
4	6.2	3.6	3.2	5.0	10.2	2.1	2.3	2.0	2.9	17.2	3.1	4.1
5	5.0	3.7	3.0	6.2	7.0	2.0	2.2	2.7	7.0	12.0	3.0	4.0
6	4.8	4.7	3.0	5.1	5.2	2.2	2.2	2.6	9.0	8.3	6.0	3.9
7	4.6	5.2	11.2	4.4	4.1	2.4	2.1	2.4	6.2	6.1	9.0	3.8
8	4.5	4.7	12.7	4.2	4.0	2.2	2.0	3.0	4.6	8.0	8.1	3.7
9	4.4	4.2	10.2	4.0	3.9	2.0	1.9	7.2	3.0	7.2	5.0	5.9
10	4.4	4.0	7.0	3.8	3.8	2.0	1.9	5.0	4.0	5.0	4.2	5.2
11	4.3	4.7	6.0	3.6	3.7	1.9	1.9	8.0	6.2	4.6	3.8	6.0
12	4.3	3.9	5.3	4.7	3.6	1.9	1.8	5.2	4.2	4.3	8.0	8.2
13	4.2	3.9	4.2	5.0	3.5	1.8	1.8	4.0	3.0	4.1	10.2	6.0
14	4.6	4.0	4.2	13.5	3.5	1.8	1.8	3.5	2.8	3.9	8.2	5.6
15	5.0	5.0	4.1	13.0	3.4	1.8	1.7	3.4	2.6	3.8	7.4	5.4
16	4.3	6.0	4.1	12.0	3.4	1.8	1.7	3.3	9.0	3.7	6.2	6.0
17	4.0	8.5	4.1	8.0	3.3	1.8	1.7	3.3	13.2	3.5	5.5	5.4
18	3.8	6.5	4.3	5.4	3.2	1.8	1.6	3.2	10.0	3.4	8.0	6.2
19	3.6	10.0	4.1	5.0	3.1	1.9	1.6	5.0	6.4	3.2	10.2	6.0
20	3.5	9.2	4.1	10.6	3.0	1.9	1.6	3.8	5.0	3.0	8.0	6.8
21	3.4	6.4	3.9	8.0	2.7	1.8	1.5	3.5	3.4	2.9	7.2	10.0
22	3.4	4.3	3.9	6.2	2.8	1.8	1.5	3.2	3.0	5.0	6.0	12.1
23	3.3	5.0	3.8	4.6	2.8	1.7	1.5	3.0	2.8	5.4	5.4	8.0
24	3.3	4.2	3.8	4.3	3.0	1.7	1.5	3.4	2.5	4.0	5.8	6.2
25	3.2	5.6	3.7	4.1	3.4	1.9	1.6	8.4	6.0	3.4	5.4	5.8
26	3.2	11.0	4.0	4.0	2.7	3.0	1.7	6.0	16.0	3.2	5.0	5.7
27	3.8	10.5	6.0	3.9	2.6	3.4	1.6	4.2	12.2	3.1	4.5	8.0
28	10.3	8.0	5.2	4.7	2.5	3.0	1.5	3.6	7.0	3.0	4.3	10.3
29	6.0	.....	4.3	9.0	2.4	2.8	1.5	3.6	5.1	2.9	6.3	7.1
30	5.1	.....	3.5	14.7	2.3	2.6	4.0	3.4	3.4	3.0	5.0	6.4
31	4.5	.....	3.4	.....	2.3	.....	2.0	3.3	.....	3.9	.....	6.0

NOTE—Ice conditions December 18-31, 1909 and during portions of January, February and December, 1910. No ice conditions reported in 1911.

October 3-4, 1911 extremely high stage caused by levee built by the East Side Levee and Sanitary District, which cut off flow into flood channel and confined entire flow to the main channel.

RATING TABLE FOR CAHOKIA CREEK NEAR POAG, ILLINOIS, FROM DECEMBER 13, 1909-DECEMBER 31, 1911

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.20	2	4.10	71	7.00	249	9.90	624
1.30	3	4.20	75	7.10	259	10.00	641
1.40	4	4.30	79	7.20	269	10.10	658
1.50	5	4.40	83	7.30	279	10.20	675
1.60	7	4.50	88	7.40	289	10.30	692
1.70	9	4.60	93	7.50	299	10.40	709
1.80	11	4.70	98	7.60	311	10.50	726
1.90	13	4.80	103	7.70	323	10.60	743
2.00	15	4.90	108	7.80	335	10.70	760
2.10	17	5.00	113	7.90	347	10.80	777
2.20	19	5.10	118	8.00	359	10.90	794
2.30	21	5.20	123	8.10	371	11.00	811
2.40	23	5.30	128	8.20	383	11.10	830
2.50	25	5.40	133	8.30	395	11.20	849
2.60	27	5.50	138	8.40	407	11.30	868
2.70	29	5.60	143	8.50	420	11.40	887
2.80	31	5.70	149	8.60	433	11.50	906
2.90	33	5.80	155	8.70	446	11.60	925
3.00	35	5.90	161	8.80	460	11.70	944
3.10	38	6.00	167	8.90	474	11.80	963
3.20	41	6.10	173	9.00	488	11.90	982
3.30	44	6.20	180	9.10	502	12.00	1,001
3.40	47	3.30	188	9.20	517	12.10	1,022
3.50	50	6.40	196	9.30	532	12.20	1,043
3.60	53	6.50	204	9.40	547	12.30	1,064
3.70	56	6.60	212	9.50	562	12.40	1,085
3.80	59	6.70	221	9.60	577	12.50	1,106
3.90	63	6.80	230	9.70	592	12.60	1,127
4.00	67	6.90	239	9.80	607	12.70	1,148

RATING TABLE FOR CAHOKIA CREEK NEAR POAG, ILLINOIS, FROM DECEMBER 13, 1909–DECEMBER 31, 1911—*Concluded*

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
12.80	1,169	13.80	1,395	14.80	1,673	15.80	2,410
12.90	1,190	13.90	1,418	14.90	1,706	15.90	2,520
13.00	1,211	14.00	1,441	15.00	1,741	16.00	2,630
13.10	1,234	14.10	1,466	15.10	1,791	17.00	3,880
13.20	1,257	14.20	1,491	15.20	1,851	18.00	5,130
13.30	1,280	14.30	1,516	15.30	1,931	19.00	6,380
13.40	1,303	14.40	1,547	15.40	2,021	20.00	7,630
13.50	1,326	14.50	1,578	15.50	2,116		
13.60	1,349	14.60	1,609	15.60	2,211		
13.70	1,372	14.70	1,640	15.70	2,310		

NOTE—The above table is not applicable for ice or obstructed channel conditions. It is based on thirteen discharge measurements made during 1910-11, and is well defined between gage heights 3.0 feet and 13.6 feet. Above 13.6 feet the rating curve is based on one discharge measurement at gage height 16.25 feet. Above gage height 16.0 feet the rating curve is a tangent, the difference being 125 per tenth.

DAILY DISCHARGE, IN SECOND-FEET, OF CAHOKIA CREEK NEAR POAG, ILLINOIS, FOR 1910–11

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1910												
1	25	21	3,290	33	44	75	23	23	167	56	46	164
2	41	21	1,580	31	460	50	21	21	41	44	47	118
3	53	67	1,060	38	1,170	47	56	21	21	34	53	73
4	67	113	488	41	692	1,020	35	19	1,210	128	61	50
5	113	75	212	196	173	1,260	31	17	1,370	1,000	59	40
6	167	59	113	155	113	562	29	17	1,080	1,740	54	30
7	123	44	79	75	204	143	27	15	592	2,630	56	20
8	75	38	75	53	323	67	25	15	289	2,960	54	10
9	50	35	63	44	173	221	23	13	113	811	56	10
10	41	31	53	41	113	113	35	11	75	377	53	10
11	35	27	47	35	347	83	59	11	47	143	52	10
12	359	23	41	38	420	67	67	9	41	110	53	9
13	2,630	21	38	38	259	53	41	9	35	93	61	9
14	3,070	19	35	33	143	71	31	7	33	83	63	9
15	2,740	113	35	50	75	133	27	7	31	73	63	8
16	1,740	67	33	299	67	188	925	5	29	71	61	8
17	1,000	50	33	830	67	75	488	5	27	65	59	8
18	1,330	47	31	212	75	56	196	4	25	63	58	8
19	1,370	44	31	138	59	47	67	4	23	59	59	7
20	887	41	29	88	50	41	41	3	21	54	56	7
21	167	35	47	71	41	35	17	3	18	53	58	7
22	67	33	44	63	35	31	15	2	19	65	59	6
23	38	31	44	56	1,330	27	13	13	17	63	59	6
24	35	29	44	50	1,280	23	11	31	22	59	58	15
25	35	27	41	47	1,260	50	15	23	53	54	67	30
26	33	67	41	50	383	35	67	19	377	56	69	41
27	31	963	41	88	113	67	31	15	1,440	52	108	35
28	29	1,190	38	71	88	75	35	11	675	53	140	47
29	27	.....	38	56	67	41	31	7	164	50	239	230
30	25	.....	38	47	289	31	27	4	79	48	230	196
31	23	.....	35	.....	88	.....	25	3	.....	47	.....	167
1911												
1	167	75	180	53	2,520	19	25	11	41	383	47	103
2	230	67	113	50	2,630	19	23	9	38	1,610	44	88
3	249	56	75	75	1,440	17	21	7	35	3,600	41	79
4	180	53	41	113	675	17	21	15	33	2,700	38	71
5	113	56	35	180	249	15	19	29	249	1,000	35	67
6	103	98	35	118	123	19	19	27	488	395	167	63
7	93	123	849	83	71	23	17	23	180	173	488	59
8	88	98	1,150	75	67	19	15	35	93	359	371	56
9	83	75	675	67	63	15	13	269	35	269	113	161
10	83	67	249	59	59	15	13	113	67	113	75	123
11	79	98	167	53	56	13	13	359	180	93	59	167
12	79	63	128	98	53	13	11	123	75	79	359	383
13	75	63	75	113	50	11	11	67	35	71	675	167
14	93	67	75	1,330	50	11	11	50	31	63	383	143
15	113	113	71	1,210	47	11	9	47	27	59	289	133
16	79	167	71	1,000	47	11	9	44	488	56	180	167
17	67	420	71	359	44	11	9	44	1,260	50	138	133

DAILY DISCHARGE, IN SECOND-FEET, OF CAHOKIA CREEK NEAR POAG, ILLINOIS, FOR 1910-11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1911												
18	59	204	79	133	41	11	7	41	641	47	359	180
19	53	641	71	113	38	13	7	113	196	41	675	167
20	50	517	71	743	35	13	7	59	113	35	359	230
21	47	196	63	359	29	11	5	50	47	33	269	641
22	47	79	63	180	31	11	5	41	35	113	167	1,020
23	44	113	59	93	31	9	5	35	31	133	133	359
24	44	75	59	79	35	9	5	47	25	67	155	180
25	41	143	56	71	47	13	7	407	167	47	133	155
26	41	811	67	67	29	35	9	167	2,630	41	113	149
27	59	726	167	63	27	47	7	75	1,040	38	88	359
28	692	359	123	98	25	35	5	53	249	35	79	692
29	167	.....	79	488	23	31	5	53	118	33	188	269
30	118	.....	50	1,640	21	27	67	47	47	35	113	196
31	88	.....	47	.....	21	.....	15	44	.....	56	.....	167

NOTE—Discharges during January-February, 1910, are probably somewhat large because of ice Discharge estimated because of ice December 4–25, 1910. No ice reported in 1911. Daily discharge October 3–4, 1911, estimated on account of the change in conditions of flood flow (see note under daily gage heights). The discharge on these two days was determined by an extension of the rating curve for the main channel alone.

MONTHLY DISCHARGE OF CAHOKIA CREEK NEAR POAG, ILLINOIS, FOR 1910-11

[Drainage area, 259 square miles]

Month	Discharge in second-feet				Runoff—depth in inches on drainage area	Accuracy
	Maximum	Minimum	Mean	Per square mile		
1910						
January	3,070	23	530	2.05	2.36	C.
February	1,190	19	119	.459	.48	C.
March	3,290	29	252	.973	1.12	A.
April	830	31	102	.394	.44	A.
May	1,330	35	323	1.25	1.44	A.
June	1,260	23	160	.618	.69	A.
July	925	11	81.7	.316	.36	A.
August	31	2	11.8	.046	.05	B.
September	1,440	17	271	1.05	1.17	A.
October	2,960	34	361	1.39	1.60	A.
November	239	46	73.7	.284	.32	A.
December	230	6	44.8	.173	.20	C.
The year	3,290	2	195	.753	10.23	.....
1911						
January	692	41	114	.440	.51	B.
February	811	53	201	.776	.81	A.
March	1,150	35	165	.637	.73	A.
April	1,640	50	305	1.18	1.32	A.
May	2,630	21	280	1.08	1.24	A.
June	47	9	17.5	.068	.08	C.
July	67	5	13.4	.052	.06	C.
August	407	7	80.8	.312	.36	A.
September	2,630	25	290	1.12	1.25	A.
October	*3,600	33	382	1.47	1.70	B.
November	675	35	211	.815	.91	A.
December	1,020	56	223	.861	.99	A.
The year	3,600	5	190	.734	9.96	.....

* October maximum estimated. See footnotes to tables of daily gage height and daily discharge.

KASKASKIA RIVER DRAINAGE BASIN

GENERAL FEATURES

Kaskaskia River, also called the Okaw, lies wholly in the State of Illinois. The river rises in the center of Champaign County, flows

southwestward, and empties into the Mississippi River in Randolph County near the city of Chester, Ill. It is about 190 miles in length, not following the bends, but as it is very crooked, its length by course is not far from 400 miles. The total drainage area is about 5,710 square miles. It has few tributaries worthy of mention, the most important being Shoal and Silver creeks, which enter from the north at the lower part of the river.

The drainage basin is long and comparatively narrow, the average width being about 30 miles, the maximum width about 60 miles. The ground is low, level, or undulating, and in consequence the slope of the river is small. The sources of the river are about 740 feet and its mouth is about 350 feet above sea level. The soil is mostly black loam. In the lower portion of the drainage area the soil gradually changes to a yellowish brown clay. The only rock exposure of any extent along this stream is found about 20 miles above Shelbyville. In this 15 or 20 mile section the banks and bed are largely of limestone or sandstone; elsewhere they are mostly soft soil with some gravel.

The basin contains no forested areas. The annual rainfall is about 40 inches. As a rule the winters are mild.

Possibilities for storage have not been investigated to any extent. Opportunities for important water-power development are entirely lacking.

Because of the lowness of its drainage area, the basin affords little ground storage. During wet weather the ground-water plane rises to the surface, and the rains run off into the streams very quickly, producing very sudden rises and floods; in dry weather, as there is little or no ground-water stored, the flow of the stream becomes very small and in some places dries up entirely. The banks of the river are low, and in times of floods large areas are covered with water, delaying the planting of crops and at times destroying growing crops. Storage possibilities, land drainage, and flood control are subjects of considerable importance in this basin.

KASKASKIA RIVER NEAR ARCOLA, ILLINOIS

Location.—At highway bridge known as the "Bagdad Bridge" about four miles west of Arcola, Ill., in the northeast part of T. 14 N., R. 7 E.

Records available.—April 11, 1908, to December 31, 1911.

Drainage area.—Three hundred and ninety square miles.

Gage.—Standard chain gage attached to bridge. Datum has remained unchanged since date of establishment.

Channel.—Probably permanent. Discharge measurements to date indicate that the point of control is permanent.

Discharge measurements.—Made from downstream side of bridge.

Floods.—The flood of May, 1908, reached a height of 17.3 feet on the gage.

Winter flow.—Ice affects the relation between gage height and discharge during portions of December, January, and February.

DISCHARGE MEASUREMENTS OF KASKASKIA RIVER NEAR ARCOLA, ILLINOIS, IN 1908–11

Date		Hydrographer	Width	Area of section	Gage height	Discharge
1908			*Feet*	*Sq.-ft.*	*Feet.*	*Sec.-ft.*
April	29	R. J. Taylor	226	1,180	10.0	1,250
July	24	R. J. Taylor	68.5	75	2.75	44
1909						
March	22	W. M. O'Neill	96	234	4.58	182
May	21	H. J. Jackson	103	308	5.32	248
November	23	H. J. Jackson	107	337	5.65	255
1910						
March	7	M. E. McChristie	205	734	7.78	635
March	10	M. E. McChristie	124	441	6.40	392
March	10	M. E. McChristie	124	442	6.37	396
May	13	H. J. Jackson	205	686	7.82	619
May	25	H. J. Jackson	228	1,230	10.29	1,380
May	27	H. J Jackson	220	1,020	9.43	965
May	28	H. J. Jackson	210	778	8.28	678
December	28	P. S. Monk	130	452	6.84	*416
1911						
October	13	Monk & Brown	122	398	6.20	344

* River full of floating ice.

DAILY GAGE HEIGHT, IN FEET, OF KASKASKIA RIVER NEAR ARCOLA, ILLINOIS, FOR 1908–11

[Lawrence L. Pfeifer, observer]

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1					8.7	5.8	3.1	2.6	0.9			
2					8.2	5.7	3.0		.8			
3						5.5	3.0	2.4	.8			
4					8.0	5.7	3.4	2.2	.8			
5					12.0	5.6		2.1	.7			
6					13.2	5.4	3.2	2.1				
7					16.2		3.6	2.0	.6			
8					17.3	5.2	3.4	2.0	.6			
9					16.7	5.4	3.2		.6			
10						5.5	3.0	1.9	.5			
11				8.5	14.7	5.4	2.9	1.9	.5			
12					13.5	5.3		1.9	.5			
13				7.7	12.9	5.2	2.7	1.8				
14				7.3	11.9		2.7	1.8				
15				7.0	11.6	4.8	2.6	1.8				
16				6.7	11.4	4.7	3.6					
17				6.3		4.6	3.4	1.6				
18				6.1	9.7	4.4	3.4	1.6				
19					9.6	4.3		1.6				
20				5.9	9.8	4.3	3.5	1.5				
21				5.6	10.0		3.5	1.5				
22				5.4	9.7	4.1	3.4	1.5				
23				5.3	9.3	4.0	3.3					
24				6.4		3.9	3.0	1.3				
25				8.2	8.6	3.8	2.9	1.3				
26					8.1	3.7		1.2				
27				9.8	7.7	3.5	2.8	1.2				
28				9.9	7.3		2.8	1.1				
29				10.0	7.0	3.3	2.7	1.0				
30				9.4	6.9	3.3	2.7					
31					6.8		2.7	.9				
1909												
1		1.4	11.0	4.0	7.6	9.8	4.8		2.7	1.7	2.6	4.8
2		1.4	10.9	4.0		8.7	4.6	3.6	2.6	1.6	3.6	4.6
3		1.6	10.1	3.9	7.5	8.2	4.5	3.4	2.5		3.4	4.5
4		2.0	9.8		7.5	7.6		3.4	2.3	1.6	3.2	4.2
5		3.6	9.4	3.9	7.4	8.6		3.2		1.6	3.1	
6		5.4	8.9	7.7	7.3		5.1	3.1		1.6	3.0	4.1
7				11.7	7.2	8.2	7.0	2.9	2.1	1.5		4.1
8		5.7	7.1	11.4	7.1	7.5	8.4		2.0	1.5	2.9	3.9
9		6.1	9.2	11.0		7.2	9.2	2.6	1.9	1.5	2.9	3.9
10		6.4	8.6	10.8	9.4	7.8	9.4	2.5	1.8		2.8	3.8
11		6.6	7.4		10.0	7.4		2.4	1.8	1.5	2.8	3.7
12		6.4	6.5	10.4	9.6	6.2	7.7	2.3		1.4	2.8	
13		6.0	6.1	13.2	8.9		10.4	2.3	1.7	1.4	2.9	5.1

DAILY GAGE HEIGHT, IN FEET, OF KASKASKIA RIVER NEAR ARCOLA, ILLINOIS, FOR 1908-11—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
14	.....	.....	.....	15.0	8.3	6.4	14.1	2.2	1.7	1.4	.....	6.2
15	.....	6.5	6.0	14.1	7.5	6.0	15.4	.....	1.6	1.4	4.6	8.1
16	.....	6.9	5.9	13.4	.....	5.5	15.7	2.1	1.6	1.4	4.9	8.3
17	.....	7.1	5.8	12.2	6.5	5.4	13.2	2.1	1.6	.....	5.9	8.1
18	.....	7.7	5.8	.....	6.1	5.2	.....	2.0	1.5	2.4	7.2	8.0
19	.....	8.4	5.7	11.4	5.8	4.9	10.4	2.0	.....	2.6	7.1	.....
20	.....	9.1	5.2	11.6	5.7	.....	9.2	1.9	1.4	2.6	6.9	7.9
21	.....	.....	.....	11.9	5.3	4.8	8.0	1.9	1.4	2.5	.....	7.8
22	.....	10.0	5.0	12.2	5.2	4.7	7.1	.....	1.9	2.5	6.2	7.8
23	.....	10.0	4.9	12.4	.....	5.0	7.0	1.7	2.3	3.0	5.7	7.7
24	.....	11.1	4.7	11.2	5.0	5.6	6.8	1.7	2.2	.....	5.8	7.6
25	0.8	14.4	4.5	.....	5.3	4.9	.....	1.6	2.1	4.0	5.6	7.5
26	.8	13.6	4.5	10.1	6.1	4.7	6.1	1.9	.....	3.9	5.4	.....
27	.9	12.2	4.4	9.4	8.0	.....	5.8	3.2	2.0	3.9	5.2	7.2
28	.9	.....	.....	8.8	12.9	4.2	5.2	3.1	1.9	3.8	.....	7.2
29	1.0	.....	4.2	8.1	.....	4.2	4.5	.....	1.8	3.7	5.1	7.1
30	1.0	.....	4.1	7.8	.....	4.0	4.1	2.8	1.7	3.7	5.0	7.0
31	.....	.....	4.0	.....	10.2	.....	3.9	2.8	.....	.....	.....	6.9
1910												
1	.....	6.5	9.7	3.8	.....	6.8	6.8	5.4	2.5	2.85	1.95	5.25
2	.....	6.4	9.4	3.8	4.65	6.1	5.5	4.6	2.45	3.1	2.6	5.15
3	5.7	6.2	8.9	.....	5.2	5.7	5.2	3.7	2.5	3.75	2.55	5.2
4	5.8	6.2	8.7	3.8	5.55	5.4	5.1	3.3	2.35	4.2	2.6	5.15
5	5.9	6.0	8.4	3.8	5.6	5.2	5.1	3.0	3.4	4.55	2.45	5.05
6	6.2	.....	.....	3.7	5.65	5.1	4.5	2.9	7.6	4.75	2.35	5.05
7	6.2	5.8	7.8	3.7	5.7	4.8	4.0	2.7	7.75	5.0	2.4	5.05
8	6.2	5.6	7.4	3.7	.....	4.5	3.8	2.6	7.4	4.95	2.35	5.0
9	.....	5.6	7.1	3.6	6.3	4.4	3.6	2.3	7.15	4.3	2.3	4.95
10	6.1	5.7	6.5	.....	6.45	4.3	3.4	2.3	7.0	3.55	2.25	4.85
11	7.1	5.4	6.1	3.5	7.1	4.2	3.3	2.2	6.8	3.45	2.25	4.75
12	7.9	5.4	6.0	3.5	7.55	4.0	3.2	2.2	5.95	3.3	2.2	4.75
13	8.2	.....	.....	3.4	8.0	3.8	3.6	2.05	5.7	3.15	2.15	4.8
14	8.4	4.8	5.7	3.4	8.2	3.7	3.6	2.1	5.35	2.9	2.15	4.65
15	8.8	4.8	5.7	3.4	.....	3.5	3.3	1.95	4.9	2.65	2.05	4.65
16	.....	4.8	5.6	3.6	6.0	3.4	4.6	3.3	4.6	2.65	2.05	4.55
17	9.8	4.9	5.4	.....	5.8	3.4	7.0	5.2	4.05	2.7	2.1	4.55
18	11.3	4.9	5.2	3.8	5.6	3.2	7.3	4.95	4.0	2.55	1.95	4.35
19	12.0	4.9	5.0	3.9	5.4	3.0	6.8	4.9	3.65	2.6	1.95	4.4
20	11.9	.....	.....	4.1	5.2	2.9	5.7	4.55	3.6	2.45	1.95	4.15
21	11.8	4.9	4.8	4.2	5.3	2.9	4.2	3.2	3.4	2.45	1.85	4.15
22	11.6	.....	4.8	4.1	.....	2.9	4.0	2.9	3.35	2.5	1.9	4.05
23	.....	4.9	4.7	4.0	7.0	2.8	3.9	2.85	3.2	2.45	1.85	3.95
24	9.9	4.9	4.6	.....	8.9	2.7	2.3	2.8	2.95	2.4	1.75	3.9
25	9.0	4.3	4.5	4.4	10.2	2.6	3.2	2.85	3.0	2.35	1.75	3.75
26	8.5	4.0	4.5	5.2	10.1	2.5	3.0	2.9	3.4	2.25	1.65	3.75
27	7.5	.....	.....	5.0	9.4	2.7	4.0	2.8	3.55	2.3	4.6	4.05
28	7.0	9.0	4.3	4.9	8.5	5.4	6.0	2.65	3.35	2.15	5.15	6.25
29	6.8	.....	4.1	4.8	7.8	7.6	6.2	2.7	3.2	2.2	5.35	6.7
30	.....	.....	4.0	4.5	7.3	7.8	8.0	2.55	2.95	2.15	5.25	7.1
31	6.5	.....	3.9	.....	7.1	.....	7.0	2.6	.....	2.05	.....	7.1
1911												
1	5.6	9.8	5.4	4.7	7.5	2.9	1.65	.9	1.7	14.6	5.1	6.9
2	5.4	9.1	5.3	6.7	7.4	2.8	1.6	.75	1.65	14.2	5.1	6.7
3	5.3	7.4	5.2	7.9	7.2	2.65	1.45	.8	1.75	13.8	5.0	6.5
4	5.3	6.7	5.2	8.1	7.0	3.0	1.5	.75	1.85	13.2	5.0	6.4
5	5.3	6.1	5.1	9.3	6.9	3.15	1.45	.75	1.9	11.1	4.9	6.2
6	5.2	6.0	6.7	9.9	6.7	3.0	1.4	.85	2.0	8.6	4.9	6.0
7	5.2	6.0	7.3	9.7	6.4	3.55	1.4	1.0	1.95	7.75	4.8	5.8
8	5.0	5.9	7.8	9.5	6.0	4.0	1.25	1.1	2.05	7.7	4.7	5.8
9	5.0	5.9	7.9	9.1	5.9	3.3	1.3	1.05	2.05	7.65	4.5	5.7
10	4.9	5.8	7.8	9.0	5.7	2.75	1.15	.95	2.2	7.55	4.5	5.4
11	4.8	5.7	7.7	8.6	5.7	2.2	1.2	.95	3.0	7.2	4.4	5.2
12	4.6	5.6	7.6	8.9	5.6	2.45	1.15	1.0	3.25	7.05	7.6	5.0
13	4.9	5.5	7.6	9.0	5.5	2.4	1.1	1.0	4.05	6.4	7.8	4.9
14	6.2	5.5	7.5	9.3	5.3	2.15	1.0	.95	4.35	6.0	8.0	4.9
15	7.4	5.7	6.9	10.0	5.1	2.1	.95	.95	4.8	6.0	8.1	4.8
16	7.2	5.8	6.9	9.8	5.0	2.1	1.0	1.2	5.1	5.9	8.2	4.7
17	7.2	6.0	6.8	9.6	5.0	2.05	.85	1.2	5.3	5.9	8.2	4.6
18	7.1	6.1	6.7	9.6	4.9	2.0	.9	1.15	6.0	5.8	8.3	4.6
19	7.1	6.3	6.5	9.4	4.9	1.95	.75	1.15	6.1	5.6	8.4	4.5
20	7.0	6.3	6.2	9.3	4.8	1.9	.8	1.15	6.15	5.9	8.4	4.6
21	6.9	6.2	6.0	9.0	4.6	1.85	.8	1.6	6.25	6.0	8.4	4.8
22	6.4	6.1	5.8	8.8	4.35	1.7	.75	2.0	6.25	6.1	8.3	4.9
23	6.3	6.0	5.7	8.7	4.3	1.6	.8	2.05	6.5	6.2	8.1	5.0
24	6.1	5.8	5.7	8.6	4.25	1.55	.75	2.05	6.6	6.1	7.9	5.1
25	6.8	5.7	5.5	8.5	4.1	1.8	.7	1.95	6.55	6.0	7.8	5.3
26	7.4	5.6	5.2	8.4	4.0	2.15	.55	2.0	6.75	5.8	7.6	5.3

DAILY GAGE HEIGHT, IN FEET, OF KASKASKIA RIVER NEAR ARCOLA, ILLINOIS, FOR 1908–11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
27	9.1	5.5	5.2	8.4	3.75	2.1	.6	1.9	6.95	5.7	7.6	5.2
28	9.2	5.4	5.1	8.3	3.6	1.95	.6	1.85	10.0	5.4	7.4	5.2
29	10.3	.....	5.0	8.0	3.35	1.8	.65	1.75	14.2	5.4	7.2	5.4
30	10.2	.....	5.0	7.9	3.0	1.8	.9	1.75	15.1	5.2	7.0	5.6
31	10.0	.....	4.9	.....	2.85	.....	.85	1.7	.....	5.1	.....	5.9

NOTE—Varying ice conditions existed December 7–31, 1909. Gage read to top of ice December 22–31, 1909. Maximum thickness of ice, five inches. Ice conditions January 1–10, and December 20–27, 1910. No frozen conditions reported by observer during 1911.

RATING TABLE FOR KASKASKIA RIVER NEAR ARCOLA, ILLINOIS, FROM APRIL 11, 1908–DECEMBER 31, 1911

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
0.60	.1	3.40	84	6.20	345	9.00	940
.70	.3	3.50	91	6.30	358	9.10	971
.80	.5	3.60	98	6.40	372	9.20	1,002
.90	.7	3.70	106	6.50	386	9.30	1,034
1.00	1.0	3.80	114	6.60	401	9.40	1,066
1.10	1.5	3.90	122	6.70	416	9.50	1,098
1.20	2.0	4.00	130	6.80	432	9.60	1,130
1.30	3	4.10	138	6.90	448	9.70	1,162
1.40	4	4.20	146	7.00	465	9.80	1,194
1.50	5	4.30	154	7.10	482	9.90	1,227
1.60	6	4.40	162	7.20	500	10.00	1,260
1.70	8	4.50	170	7.30	518	10.10	1,293
1.80	10	4.60	178	7.40	537	10.20	1,326
1.90	12	4.70	187	7.50	557	10.30	1,360
2.00	15	4.80	196	7.60	577	10.40	1,394
2.10	18	4.90	205	7.70	598	10.50	1,428
2.20	21	5.00	214	7.80	620	10.60	1,462
2.30	25	5.10	224	7.90	642	10.70	1,496
2.40	29	5.20	234	8.00	665	10.80	1,530
2.50	33	5.30	244	8.10	689	10.90	1,565
2.60	38	5.40	254	8.20	714	11.00	1,600
2.70	43	5.50	265	8.30	740	12.00	1,960
2.80	48	5.60	276	8.40	767	13.00	2,320
2.90	53	5.70	287	8.50	794	14.00	2,680
3.00	58	5.80	298	8.60	822	15.00	3,040
3.10	64	5.90	309	8.70	850	16.00	3,400
3.20	70	6.00	320	8.80	879	17.00	3,780
3.30	77	6.10	332	8.90	909	18.00	4,120

NOTE—The above table is not applicable for ice or obstructed channel conditions. It is based on fourteen discharge measurements made during 1908–11, and is well defined between gage heights 2.7 and 8.0 feet and fairly well defined between gage heights 8.1 feet and 10.0 feet; above gage height 11.0 feet the rating curve is extended on a tangent, the difference being 36 per tenth.

DAILY DISCHARGE, IN SECOND-FEET, OF KASKASKIA RIVER NEAR ARCOLA, ILLINOIS, FOR 1908–11

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1	.....	.....	.....	.....	850	298	64	38	.....	.....	.....	.....
2	.....	.....	.....	.....	714	287	58	34	.....	.....	.....	.....
3	.....	.....	.....	.....	690	265	58	29	.....	.....	.....	.....
4	.....	.....	.....	.....	665	287	84	21	.....	.....	.....	.....
5	.....	.....	.....	.....	1,960	276	77	18	.....	.....	.....	.....
6	.....	.....	.....	.....	2,430	254	70	18	.....	.....	.....	.....
7	.....	.....	.....	.....	3,470	244	98	15	.....	.....	.....	.....
8	.....	.....	.....	.....	3,870	234	84	15	.....	.....	.....	.....

DAILY DISCHARGE, IN SECOND-FEET, OF KASKASKIA RIVER NEAR ARCOLA, ILLINOIS, FOR 1908-11—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
9					3,650	254	70	14				
10					3,290	265	58	12				
11				794	2,930	254	53	12				
12				696	2,500	244	48	12				
13				598	2,280	234	43	10				
14				518	1,920	215	43	10				
15				465	1,820	196	38	10				
16				416	1,740	187	98	8				
17				358	1,450	178	84	6				
18				332	1,160	162	84	6				
19				320	1,130	154	88	6				
20				309	1,190	154	91	5				
21				276	1,260	146	91	5				
22				254	1,160	138	84	5				
23				244	1,030	130	77	4				
24				372	926	122	58	3				
25				714	822	114	53	3				
26				952	689	106	50	2				
27				1,190	598	91	48	2				
28				1,230	518	84	48	1.5				
29				1,260	465	77	43	1.0				
30				1,070	448	77	43	.8				
31					432		43	.7				
1909												
1		4	1,600	130	577	1,190	196	110	43	8	98	196
2		4	1,560	130	567	850	178	98	38	6	98	178
3		6	1,290	122	557	714	170	84	33	6	84	170
4		15	1,190	122	557	577	188	84	25	6	70	146
5		98	1,070	122	537	822	206	70	23	6	64	142
6		254	909	598	518	768	224	64	20	6	58	138
7		270	696	1,850	500	714	465	53	18	5	56	138
8		287	482	1,740	482	557	767	46	15	5	53	122
9		332	1,000	1,660	776	500	1,000	38	12	5	53	122
10		372	822	1,530	1,070	620	1,070	33	10	5	48	114
11		401	537	1,460	1,260	537	834	29	10	5	48	106
12		372	386	1,390	1,130	345	598	25	9	4	48	165
13		320	332	2,390	909	358	1,390	25	8	4	53	224
14		353	326	3,040	740	372	2,720	21	8	4	116	345
15		386	320	2,720	557	320	3,180	20	6	4	178	689
16		448	309	2,460	472	265	3,290	18	6	4	205	740
17		482	298	2,030	386	254	2,390	18	6	16	309	689
18		598	298	1,880	332	234	1,890	15	5	29	500	665
19		767	287	1,740	298	205	1,390	15	4.5	38	482	550
20		971	234	1,820	287	200	1,000	12	4	38	448	500
21		1,120	224	1,920	244	196	665	12	4	33	396	450
22		1,260	214	2,030	234	187	482	11	12	33	345	400
23		1,260	205	2,100	224	214	465	10	25	58	287	350
24		1,640	187	1,670	214	276	432	10	21	94	298	300
25	0.5	2,820	170	1,480	244	205	382	6	18	130	276	250
26	.5	2,540	170	1,290	332	187	332	12	16	122	254	200
27	.7	2,030	162	1,070	665	166	298	70	15	122	234	170
28	.7	1,820	154	879	2,280	146	234	64	12	114	229	150
29	1.0		146	689	1,960	146	170	56	10	106	224	130
30	1.0		138	620	1,640	130	138	48	8	106	214	100
31	2.5		130		1,330		122	48		102		100
1910												
1	100	386	1,160	114	178	432	432	254	33	50	14	239
2	100	372	1,070	114	182	332	265	178	31	64	38	229
3	150	345	909	114	234	287	234	106	33	110	36	234
4	170	345	850	114	270	254	224	77	27	146	38	229
5	170	320	767	114	276	234	224	58	84	174	31	219
6	170	309	689	106	282	224	170	53	577	192	27	219
7	170	298	620	106	287	196	130	43	609	214	29	219
8	170	276	537	106	320	170	114	38	537	210	27	214
9	200	276	482	98	358	162	98	25	491	154	25	210
10	332	287	386	94	379	154	84	25	465	94	23	200
11	482	254	332	91	482	146	77	21	432	88	23	192
12	642	254	320	91	567	130	70	21	314	77	21	192
13	714	224	304	84	665	114	98	16	287	67	20	196
14	767	196	287	84	714	106	98	18	249	53	20	182
15	879	196	287	84	482	91	77	13	205	40	16	182
16	1,030	196	276	98	320	84	178	77	178	40	16	174
17	1,190	205	254	106	298	84	465	234	134	43	18	174
18	1,710	205	234	114	276	70	518	210	130	36	14	158
19	1,960	205	214	122	254	58	432	205	102	38	14	162
20	1,920	205	205	138	234	53	287	174	98	31	14	142

DAILY DISCHARGE, IN SECOND-FEET, OF KASKASKIA RIVER NEAR ARCOLA, ILLINOIS, FOR 1908-11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1910												
21	1,890	205	196	146	244	53	146	70	84	31	11	142
22	1,820	205	196	138	338	53	130	33	80	33	12	134
23	1,430	205	187	130	465	48	122	50	70	31	11	126
24	1,070	205	178	146	909	43	25	48	55	29	9	122
25	940	154	170	162	1,330	38	70	50	58	27	9	110
26	794	130	170	234	1,290	33	58	53	84	23	7	110
27	557	386	162	214	1,070	43	130	48	94	25	178	134
28	465	940	154	205	794	254	320	40	80	20	229	352
29	432	.....	138	196	620	577	345	43	70	21	249	416
30	408	.....	130	170	518	620	665	36	55	20	239	482
31	386	.....	122	.....	482	.....	465	38	.....	16	.....	482
1911												
1	276	1,190	254	187	557	53	7	.7	8	2,900	224	448
2	254	971	244	416	537	48	6	.4	7	2,750	224	416
3	244	537	234	642	500	40	4.5	.5	9	2,610	214	386
4	244	416	234	689	465	58	5	.4	11	2,390	214	372
5	244	332	224	1,030	448	67	4.5	.4	12	1,640	205	345
6	234	320	416	1,230	416	58	4	.6	15	822	205	320
7	234	320	518	1,160	372	94	4	1	14	609	196	298
8	214	309	620	1,100	320	130	2.5	1.5	16	598	187	298
9	214	309	642	971	309	77	3	1.2	16	588	170	287
10	205	298	620	940	287	46	1.8	.8	21	567	170	254
11	196	287	598	822	287	21	2	.8	58	500	162	234
12	178	276	577	909	276	31	1.8	1	74	474	577	214
13	205	265	577	940	265	29	1.5	1	134	372	620	205
14	345	265	557	1,030	244	20	1	.8	158	320	665	205
15	537	287	448	1,260	224	18	.8	.8	196	320	689	196
16	500	298	448	1,190	214	18	1	2	224	309	714	187
17	500	320	432	1,130	214	16	.6	2	244	309	714	178
18	482	332	416	1,130	205	15	.7	1.8	320	298	740	178
19	482	358	386	1,070	205	14	.4	1.8	332	276	767	170
20	465	358	345	1,030	196	12	.5	1.8	338	309	767	178
21	448	345	320	940	178	11	.5	6	352	320	767	196
22	372	332	298	879	158	8	.4	15	352	332	740	205
23	358	320	287	850	154	6	.5	16	386	345	689	214
24	332	298	287	822	150	5.5	.4	16	401	332	642	224
25	432	287	265	794	138	10	.3	14	394	320	620	244
26	537	276	234	767	130	20	.0	15	424	298	577	244
27	971	265	234	767	110	18	.1	12	456	287	577	234
28	1,000	254	224	740	98	14	.1	11	1,260	254	537	234
29	1,360	.....	214	660	80	10	.2	9	2,750	254	500	254
30	1,330	.....	214	642	58	10	.7	9	3,080	234	465	276
31	1,260	.....	205	.....	50	.....	.6	8	.....	224	.....	309

NOTE—Discharge interpolated for days of missing gage heights. There was no flow September 1, 1908, to January 24, 1909. Discharges estimated because of ice conditions December 19 to 31, 1909, and January 1 to 10, 1910. On July 11 and August 11, 1911, the observer reported "standing in pools, not running." Determination of daily discharge in July and August, 1911, is approximate but the flow is believed not to have been zero on July 11 or Aug. 11.

MONTHLY DISCHARGE OF KASKASKIA RIVER NEAR ARCOLA, ILLINOIS, FOR 1908-11

[Drainage area, 390 square miles]

Month	Discharge in second-feet				Runoff depth in inches on drainage area	Accuracy
	Maximum	Minimum	Means	Per square mile		
1908						
April 11-30	1,260	244	618	1.58	1.18	A.
May	3,870	432	1,550	3.97	4.58	B.
June	298	77	191	.490	.55	A.
July	98	43	65.5	.168	.19	B.
August	38	.7	10.5	.027	.03	C.
September[1]	0	0	.0	.00	.00	
October[1]	0	0	.0	.00	.00	
November[1]	0	0	.0	.00	.00	
December[1]	0	0	.0	.00	.00	

MONTHLY DISCHARGE OF KASKASIA RIVER NEAR ARCOLA, ILLINOIS, FOR 1908-11—*Concluded*

Month	Discharge in second-feet				Runoff—depth in inches on drainage area	Accuracy
	Maximum	Minimum	Mean	Per square mile		
1909						
January[1]	2.5	0	0.22	.00056	.0006	D.
February	2,820	4	758	1.94	2.02	B.
March	1,600	130	511	1.31	1.51	A.
April	3,040	122	1,420	3.64	4.06	B.
May	2,280	214	706	1.81	2.09	A.
June	1,190	130	408	1.05	1.17	A.
July	3,290	122	867	2.22	2.56	B.
August	110	6	39.5	.101	.12	B.
September	43	4	14.8	.038	.04	B.
October	130	4	39.5	.101	.12	B.
November	500	48	194	.497	.55	A.
December	740	.....	282	.723	.83	C.
The year	3,290	0	437	1.12	15.08	
1910						
January	1,960	.....	749	1.92	2.21	C.
February	940	130	278	.713	.74	B.
March	1,170	122	387	.992	1.14	A.
April	234	84	128	.328	.37	A.
May	1,330	178	488	1.25	1.44	A.
June	620	33	171	.438	.49	A.
July	665	25	218	.559	.64	A.
August	254	13	76.6	.196	.23	A.
September	609	27	192	.492	.55	A.
October	214	16	70.9	.182	.21	A.
November	249	7	47.3	.121	.14	A.
December	482	.....	212	.544	.63	D.
The year	1,960	7	252	.646	8.79	
1911						
January	1,360	178	473	1.21	1.40	B.
February	1,190	254	372	.954	.99	A.
March	642	205	373	.956	1.10	A.
April	1,260	187	891	2.28	2.54	B.
May	557	50	253	.649	.75	A.
June	130	5.5	32.6	.084	.09	C.
July	7	.0*	1.82	.0047	.005	D.
August	16	.4*	4.91	.013	.01	D.
September	3,080	7	402	1.03	1.15	B.
October	2,900	224	715	1.83	2.11	B.
November	767	162	485	1.24	1.38	A.
December	448	170	258	.66	.76	A.
The year	3,080	0.0	354	.908	12.28	

[1] No flow from September 1, 1908 to January 24, 1909.
* See foot-notes to table of daily discharge.

KASKASKIA RIVER AT SHELBYVILLE, ILLINOIS

Location.—At highway bridge in the eastern edge of Shelbyville, Ill., just above the Chicago and Eastern Illinois and Big Four Railroad bridges.

Records available.—February 25, 1908, to December 31, 1911.

Drainage area.—One thousand and thirty square miles.

Gage.—Standard chain gage attached to bridge. Datum unchanged.

Channel.—Somewhat shifting; section is at a pool and the point of control has remained unchanged.

Discharge measurements.—Made from downstream side of bridge and short approaches.

Floods.—Maximum gage height since establishment of the gage is 25.8 feet which occurred in May, 1908. No records of floods prior to establishment of gage are available.

Point of zero flow.—Not determined.

Winter flow.—Ice may affect the relation between gage height and discharge during portions of December, January, and February.

DISCHARGE MEASUREMENTS OF KASKASKIA RIVER AT SHELBYVILLE, ILLINOIS, IN 1908–11

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1908		*Feet*	*Square feet*	*Feet*	*Second-feet*
February 24	R. J. Taylor	147	975	11.53	2,350
April 29	R. J. Taylor	149	1,020	12.2	2,720
June 10	R. J. Taylor	113	1,010	8.7	1,080
July 21	R. J. Taylor	103	713	6.3	218
1909					
February 8	R. J. Taylor	105	788	6.85	402
February 9	R. J. Taylor	108	852	7.32	572
March 17	W. M. O'Neill	110	560	8.00	761
May 14	H. J. Jackson	151	995	11.48	2,130
May 15	H. J. Jackson	124	892	10.76	1,910
December 9	H. J. Jackson	102	224	6.40	*216
1910					
March 14	M. E. McChristie	110	443	7.94	797
May 14	H. J. Jackson	123	770	10.47	1,760
May 30	H. J. Jackson	141	866	11.27	2,060
July 25	H. J. Jackson	105	267	6.50	306
December 31	P. S. Monk	115	507	8.48	†952
1911					
October 4	Monk & Brown	233	2,920	19.92	6,940

* Partial ice cover; 47 per cent of the discharge was under ice.
† Not at measuring section. River full of floating ice.

DAILY GAGE HEIGHT, IN FEET, OF KASKASKIA RIVER AT SHELBYVILLE, ILLINOIS, FOR 1908–11

[Homer Pound, observer]

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1			15.1	11.6	11.8	8.6	6.4	5.8	5.4	5.3	4.9	5.4
2			15.5	12.8	11.4	8.4	6.3	5.7	5.3	5.2	5.0	5.4
3			16.4	11.8	10.4	8.3	6.4	5.7	5.3	5.2	5.0	5.4
4			16.0	11.4	21.2	8.8	6.3	5.6	5.2	5.2	5.1	5.3
5			15.6	9.9	22.8	8.4	6.3	5.6	5.2	5.1	5.1	5.3
6			15.4	9.6	22.3	8.1	6.4	5.5	5.2	5.1	5.2	5.3
7			15.8	9.5	22.7	7.8	6.7	5.5	5.2	5.1	5.2	5.3
8			16.2	11.5	25.8	7.6	6.8	5.5	5.2	5.1	5.2	5.3
9			16.6	11.7	23.6	8.0	6.9	5.6	5.1	5.1	5.2	5.3
10			17.0	11.8	21.2	8.4	6.6	5.7	5.1	5.1	5.2	5.4
11			16.8	11.5	20.2	8.3	6.5	5.7	5.0	5.1	5.2	5.4
12			15.8	11.3	19.5	7.9	6.5	5.6	5.0	5.1	5.2	5.4
13			14.8	11.1	18.8	7.6	6.3	5.7	5.0	5.1	5.2	5.4
14			14.2	11.0	17.9	7.5	6.2	5.6	5.0	5.1	5.2	5.4
15			13.6	10.1	17.0	7.3	6.0	5.6	5.0	5.0	5.2	5.4
16			13.1	9.6	16.4	7.0	6.0	5.5	5.0	5.0	5.3	5.4
17			11.9	8.9	15.9	6.9	5.9	5.5	5.1	5.0	5.3	5.3
18			10.9	8.8	15.0	6.7	5.8	5.5	5.1	5.0	5.3	5.3
19			10.0	8.7	14.9	6.6	6.1	5.4	5.1	5.0	5.3	5.3
20			10.1	8.6	13.7	6.8	6.1	5.4	5.1	5.0	5.3	5.3
21			9.7	8.5	12.8	6.7	6.1	5.4	5.1	5.0	5.3	5.3
22			9.6	8.4	13.7	6.7	6.0	5.3	5.0	5.0	5.4	5.3
23			9.5	8.3	13.1	6.6	6.0	5.3	5.0	4.9	5.4	5.3
24			9.4	10.1	12.6	6.5	5.9	5.3	5.0	4.9	5.5	5.3
25		14.2	9.3	10.6	12.0	6.5	5.8	5.3	5.0	4.9	5.5	5.2
26		16.4	9.0	11.2	11.5	6.4	5.8	5.3	5.0	5.0	5.6	5.2
27		17.0	8.7	11.8	11.3	6.3	5.7	5.3	5.0	5.0	5.6	5.2
28		16.6	8.5	12.2	10.0	6.1	5.7	5.2	5.1	5.0	5.5	5.3
29		15.3	8.9	12.4	9.8	6.2	5.6	5.2	5.2	4.9	5.5	5.3
30			8.9	11.9	9.4	6.3	5.7	5.3	5.3	4.9	5.5	5.4
31			8.7		9.0		5.8	5.3		4.9		5.4

DAILY GAGE HEIGHT, IN FEET, OF KASKASKIA RIVER AT SHELBYVILLE, ILLINOIS, FOR 1908–11—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
1	5.4	5.7	12.8	6.8	13.3	14.9	6.9	6.7	5.4	5.2	5.9	6.8
2	5.4	5.8	12.0	6.8	10.5	14.3	6.5	6.6	5.4	5.2	5.8	6.7
3	5.4	5.8	11.0	6.7	10.4	14.2	6.5	6.4	5.4	5.2	5.8	6.7
4	5.4	5.9	10.3	6.7	10.4	13.5	6.4	6.3	5.4	5.2	5.7	6.6
5	5.4	6.1	9.7	6.7	10.3	12.5	11.1	6.2	5.3	5.2	5.7	6.6
6	5.4	6.2	9.3	15.9	9.9	11.9	12.2	6.0	5.3	5.1	5.7	6.5
7	5.4	6.6	9.4	15.8	9.8	11.5	17.3	5.9	5.2	5.1	5.8	6.6
8	5.4	7.0	9.6	15.0	9.9	10.9	17.7	5.8	5.2	5.1	5.8	6.6
9	5.4	7.1	9.8	14.1	13.9	10.5	16.6	5.8	5.3	5.1	5.7	6.6
10	5.4	7.3	9.6	13.0	13.9	11.9	13.2	5.8	5.3	5.1	5.7	6.6
11	5.4	7.5	9.3	12.8	13.8	11.9	11.9	5.8	5.3	5.1	5.6	6.5
12	5.3	7.9	9.1	14.7	13.6	10.9	11.9	5.7	5.2	5.1	5.8	6.9
13	5.3	8.2	9.0	19.4	11.9	10.3	13.8	5.7	5.2	5.1	5.8	7.6
14	5.3	8.6	8.7	20.8	11.65	10.2	12.9	5.6	5.2	5.1	5.9	8.7
15	5.3	8.8	8.4	19.8	11.0	10.4	12.5	5.5	5.2	5.1	5.9	9.7
16	5.3	9.0	8.1	18.9	10.1	9.8	11.9	5.4	5.2	5.1	6.9	9.9
17	5.3	9.7	8.6	18.0	9.3	10.6	12.6	5.4	5.2	5.1	6.8	9.8
18	5.3	11.0	7.8	17.3	8.9	9.6	13.7	5.3	5.2	5.3	7.6	9.6
19	5.4	12.1	7.7	16.3	8.6	8.9	13.9	5.3	5.2	5.6	7.6	8.9
20	5.5	13.2	7.6	14.8	8.2	7.9	13.3	5.3	5.2	5.7	7.6	9.2
21	5.6	13.5	7.5	17.5	7.2	7.5	11.9	5.3	5.2	5.7	7.8	9.1
22	5.7	13.6	7.3	18.9	7.7	7.4	11.7	5.2	5.2	5.6	8.4	8.9
23	5.8	13.7	7.1	19.8	7.6	7.4	10.5	5.1	5.2	6.0	8.3	8.8
24	5.8	14.2	7.3	17.3	7.4	7.2	9.6	5.1	5.6	6.0	8.2	8.7
25	5.8	14.3	7.4	17.2	7.7	7.2	7.6	5.1	5.6	6.0	8.1	8.2
26	5.7	14.3	7.5	16.8	9.4	7.8	7.7	5.3	5.4	6.0	7.7	8.1
27	5.7	13.9	7.4	15.7	11.2	7.7	7.5	5.2	5.3	6.0	7.5	7.9
28	5.7	13.3	7.1	13.9	11.0	7.6	7.2	5.2	5.3	6.0	7.3	7.9
29	5.7	.....	7.1	13.8	11.2	7.3	6.9	5.4	5.3	6.0	7.1	7.6
30	5.7	.....	7.0	12.0	12.6	7.2	6.8	5.4	5.3	6.0	6.9	7.6
31	5.7	.....	6.9	.....	14.2	.....	6.7	5.5	.....	5.9	.....	7.6
1910												
1	7.6	7.9	14.1	6.5	6.8	9.6	7.8	8.9	5.6	6.25	5.65	9.55
2	7.9	7.7	13.1	6.5	6.7	9.2	7.9	8.35	5.8	6.15	5.8	8.65
3	7.9	7.8	13.3	6.4	7.4	8.8	8.2	7.5	5.65	6.1	5.85	7.75
4	8.2	7.7	13.5	6.4	7.8	8.5	7.1	6.75	5.8	6.15	5.75	7.65
5	8.2	7.7	13.6	6.4	8.2	8.5	7.9	6.5	5.85	6.3	5.8	7.4
6	9.1	7.6	11.6	6.4	8.1	8.1	7.5	6.3	8.9	7.35	5.75	7.15
7	9.1	7.5	11.1	6.3	9.1	7.7	7.25	6.45	10.0	8.45	5.8	6.65
8	9.4	7.6	10.4	6.3	9.8	7.4	6.85	6.1	13.15	8.7	5.75	6.65
9	9.6	7.4	9.9	6.1	9.9	7.3	6.5	5.85	11.8	8.35	5.65	6.75
10	8.5	7.3	9.4	6.1	9.1	7.1	6.3	5.9	10.45	7.9	5.65	6.8
11	7.9	7.2	8.9	6.1	10.5	7.1	6.3	5.8	9.6	7.45	5.65	6.65
12	7.8	7.0	8.5	6.2	11.2	6.9	6.15	5.75	8.6	7.15	5.75	6.55
13	10.5	6.6	8.5	6.2	11.1	6.8	6.85	5.8	7.85	7.0	5.8	6.6
14	13.1	6.9	7.9	6.2	10.5	6.6	6.8	5.65	7.6	6.8	5.65	6.75
15	13.9	6.9	7.6	6.2	10.1	6.5	6.7	5.7	7.05	6.55	5.65	6.75
16	13.5	6.9	7.5	6.6	9.7	6.5	7.9	7.1	6.9	6.8	5.65	6.55
17	12.6	6.7	7.4	6.7	9.2	6.4	8.65	7.75	6.65	6.45	5.65	6.45
18	15.1	6.5	7.3	6.7	8.6	6.4	9.65	8.5	6.5	6.35	5.7	6.25
19	17.0	6.7	7.2	6.7	8.2	6.4	9.2	7.85	6.25	6.3	5.65	6.25
20	18.6	6.6	7.1	6.7	8.1	6.3	8.6	7.5	6.2	6.25	5.65	6.3
21	15.6	7.1	6.9	6.7	7.9	6.1	8.1	6.7	6.15	6.4	5.65	6.15
22	14.0	7.0	6.9	6.6	8.7	5.9	7.35	6.55	6.05	6.25	5.65	6.15
23	13.5	7.0	6.9	6.6	14.1	5.9	6.85	6.5	6.1	6.15	5.7	6.25
24	12.2	6.8	6.8	6.5	15.2	5.9	6.7	7.25	6.15	6.2	5.65	6.65
25	11.2	6.7	6.8	6.5	16.2	5.9	6.45	6.9	6.7	6.05	5.65	6.5
26	10.5	6.7	6.7	6.5	15.6	5.9	6.1	6.5	6.55	6.1	5.65	6.25
27	9.7	11.9	6.7	6.6	13.3	6.4	6.1	6.25	6.45	6.05	13.75	6.05
28	9.1	13.5	6.7	6.7	12.5	6.8	6.15	6.2	6.4	6.05	13.9	7.85
29	8.8	.....	6.6	6.9	12.2	7.1	6.4	5.85	6.35	6.0	11.65	9.75
30	8.5	.....	6.6	6.8	11.4	7.6	7.85	5.8	6.3	5.85	10.2	9.4
31	8.2	.....	6.5	.....	10.4	.....	8.8	5.65	.....	5.8	.....	8.95
1911												
1	8.9	12.5	8.3	7.1	10.4	6.25	5.25	5.05	5.15	22.25	8.3	8.3
2	9.0	12.3	8.1	7.1	10.1	6.2	5.5	5.1	5.05	21.5	8.0	8.2
3	9.1	11.9	7.9	7.7	9.65	6.1	5.35	5.15	5.05	20.55	7.4	8.1
4	9.9	10.4	7.8	10.2	9.2	6.05	5.4	5.2	5.1	19.15	7.6	8.0
5	10.3	9.5	7.7	14.5	8.65	6.1	5.25	5.2	5.15	18.4	7.8	7.9
6	10.3	9.4	7.6	18.9	8.4	6.05	5.3	5.25	5.25	17.4	7.9	7.7
7	10.3	9.3	9.4	14.5	8.1	6.1	5.3	5.3	5.45	15.8	7.7	7.1
8	9.6	9.2	11.6	13.3	7.85	6.1	5.25	5.25	5.75	14.8	7.6	7.2
9	9.9	8.2	11.7	13.1	7.7	6.05	5.3	5.2	5.7	13.3	7.6	7.4
10	8.1	8.1	11.4	12.3	7.6	6.1	5.25	5.15	5.45	12.2	7.7	7.6
11	7.6	8.4	10.9	11.5	7.45	6.0	5.8	5.05	6.45	11.4	7.8	7.7
12	7.1	8.2	10.6	10.6	7.3	5.95	5.25	5.05	7.75	10.9	10.2	7.8
13	10.4	7.9	10.1	10.1	7.15	5.9	5.2	5.05	11.15	10.2	10.5	7.8

DAILY GAGE HEIGHT, IN FEET, OF KASKASKIA RIVER AT SHELBYVILLE, ILLINOIS, FOR 1908–11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1911												
14	14.8	7.1	9.6	14.7	7.1	5.8	5.2	5.05	9.6	9.8	10.7	7.9
15	15.8	8.4	8.9	16.6	7.0	5.7	5.15	5.1	8.65	9.4	10.5	8.0
16	13.8	8.7	8.6	16.1	6.85	5.65	5.1	5.05	9.15	9.0	10.4	8.0
17	11.5	9.1	8.3	15.1	6.8	5.7	5.1	4.95	9.75	8.9	12.2	8.1
18	10.4	9.8	8.0	13.6	6.7	5.55	5.05	4.95	8.85	8.7	12.4	8.0
19	10.1	10.4	7.8	13.1	6.65	5.6	5.2	4.95	8.8	8.5	12.5	7.9
20	9.7	10.5	7.7	12.15	6.9	5.55	5.15	5.0	8.85	9.0	12.0	8.2
21	9.2	10.2	7.6	11.1	8.45	5.6	5.2	4.95	8.15	10.0	11.8	8.6
22	9.2	9.8	7.4	10.15	7.5	5.6	5.2	4.85	7.75	10.9	11.5	8.9
23	8.6	9.5	7.3	9.6	7.3	5.55	5.05	4.75	7.35	11.0	11.2	8.0
24	8.3	9.2	7.2	9.1	7.05	5.6	5.1	5.25	7.1	11.2	10.7	9.1
25	7.9	9.1	7.1	8.75	6.8	5.55	5.05	5.3	11.05	11.4	10.2	9.0
26	8.1	9.1	7.2	8.5	6.6	5.8	5.1	5.35	12.75	11.7	9.8	9.2
27	8.7	8.9	7.4	8.15	6.35	5.75	5.05	5.45	12.35	11.0	9.5	9.0
28	12.4	8.6	7.3	8.3	6.3	5.7	5.1	5.35	16.55	9.9	9.1	8.9
29	13.1	.....	7.3	8.3	6.45	5.5	5.1	5.25	19.7	9.5	8.8	8.7
30	12.9	.....	7.3	9.35	6.4	5.35	5.05	5.3	22.75	9.0	8.5	8.5
31	12.7	.....	7.1	.....	6.4	.....	5.1	5.15	.....	8.6	.....	8.8

NOTE—Ice conditions existed January 1 to February 11, and December 7 to 31, 1909, January 3 to 19, and February 23 to 26, 1910, and January 5 to 10, 1911.

RATING TABLE FOR KASKASKIA RIVER AT SHELBYVILLE, ILLINOIS, FROM FEBRUARY 28, 1908 TO DECEMBER 31, 1911

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
4.70	5	9.00	1,190	13.30	3,265	17.60	5,678
4.80	6	9.10	1,230	13.40	3,320	17.70	5,736
4.90	8	9.20	1,272	13.50	3,375	17.80	5,794
5.00	10	9.30	1,314	13.60	3,430	17.90	5,852
5.10	13	9.40	1,358	13.70	3,485	18.00	5,910
5.20	18	9.50	1,402	13.80	3,540	18.10	5,969
5.30	25	9.60	1,446	13.90	3,595	18.20	6,028
5.40	34	9.70	1,492	14.00	3,650	18.30	6,087
5.50	45	9.80	1,538	14.10	3,705	18.40	6,146
5.60	58	9.90	1,584	14.20	3,760	18.50	6,205
5.70	73	10.00	1,630	14.30	3,815	18.60	6,264
5.80	90	10.10	1,676	14.40	3,870	18.70	6,323
5.90	109	10.20	1,722	14.50	3,925	18.80	6,382
6.00	130	10.30	1,768	14.60	3,980	18.90	6,441
6.10	160	10.40	1,814	14.70	4,035	19.00	6,500
6.20	192	10.50	1,860	14.80	4,090	19.10	6,560
6.30	224	10.60	1,908	14.90	4,145	19.20	6,620
6.40	256	10.70	1,956	15.00	4,200	19.30	6,680
6.50	290	10.80	2,004	15.10	4,256	19.40	6,740
6.60	324	10.90	2,052	15.20	4,312	19.50	6,800
6.70	358	11.00	2,100	15.30	4,368	19.60	6,860
6.80	392	11.10	2,150	15.40	4,424	19.70	6,920
6.90	426	11.20	2,200	15.50	4,480	19.80	6,980
7.00	460	11.30	2,250	15.60	4,536	19.90	7,040
7.10	494	11.40	2,300	15.70	4,592	20.00	7,100
7.20	528	11.50	2,350	15.80	4,648	20.10	7,160
7.30	562	11.60	2,400	15.90	4,704	20.20	7,220
7.40	596	11.70	2,450	16.00	4,760	20.30	7,280
7.50	630	11.80	2,500	16.10	4,817	20.40	7,340
7.60	666	11.90	2,550	16.20	4,874	20.50	7,400
7.70	702	12.00	2,600	16.30	4,931	20.60	7,460
7.80	738	12.10	2,650	16.40	4,988	20.70	7,520
7.90	774	12.20	2,700	16.50	5,045	20.80	7,580
8.00	810	12.30	2,750	16.60	5,102	20.90	7,640
8.10	846	12.40	2,800	16.70	5,159	21.00	7,700
8.20	882	12.50	2,850	16.80	5,216	21.10	7,760
8.30	918	12.60	2,900	16.90	5,273	21.20	7,820
8.40	956	12.70	2,950	17.00	5,330	21.30	7,880
8.50	994	12.80	3,000	17.10	5,388	21.40	7,940
8.60	1,032	12.90	3,050	17.20	5,446	21.50	8,000
8.70	1,070	13.00	3,100	17.30	5,504	21.60	8,060
8.80	1,110	13.10	3,155	17.40	5,562	21.70	8,120
8.90	1,150	13.20	3,210	17.50	5,620	21.80	8,180

RATING TABLE FOR KASKASKIA RIVER AT SHELBYVILLE, ILLINOIS, FROM FEBRUARY 28, 1908 TO DECEMBER 31, 1911—*Concluded*

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
21.90	8,240	23.00	8,900	24.10	9,560	25.20	10,220
22.00	8,300	23.10	8,960	24.20	9,620	25.30	10,280
22.10	8,360	23.20	9,020	24.30	9,680	25.40	10,340
22.20	8,420	23.30	9,080	24.40	9,740	25.50	10,400
22.30	8,480	23.40	9,140	24.50	9,800	25.60	10,460
22.40	8,540	23.50	9,200	24.60	9,860	25.70	10,520
22.50	8,600	23.60	9,260	24.70	9,920	25.80	10,580
22.60	8,660	23.70	9,320	24.80	9,980	25.90	10,640
22.70	8,720	23.80	9,380	24.90	10,040	26.00	10,700
22.80	8,780	23.90	9,440	25.00	10,100		
22.90	8,840	24.00	9,500	25.10	10,160		

NOTE—The above table is not applicable for ice or obstructed channel conditions. Is is based on sixteen discharge measurements made during 1908-1911, and is well defined between gage heights 6.3 feet and 20.0 feet. Above gage height 19.0 feet the rating curve is a tangent, the difference being 60 per tenth.

DAILY DISCHARGE, IN SECOND-FEET, OF KASKASKIA RIVER AT SHELBYVILLE, ILLINOIS, FOR 1908-11

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1	.....	.....	4,260	2,400	2,500	1,030	256	90	34	25	8	34
2	.....	.....	4,480	3,000	2,300	956	224	73	25	18	10	34
3	.....	.....	4,990	2,500	1,810	918	256	73	25	18	10	34
4	.....	.....	4,760	2,300	7,820	1,110	224	58	18	18	13	25
5	.....	.....	4,540	1,580	8,780	956	224	58	18	13	13	25
6	.....	.....	4,420	1,450	8,480	846	256	45	18	13	18	25
7	.....	.....	4,650	1,400	8,720	738	358	45	18	13	18	25
8	.....	.....	4,870	2,350	10,600	666	392	45	18	13	18	25
9	.....	.....	5,100	2,450	9,260	810	426	58	13	13	18	25
10	.....	.....	5,330	2,500	7,820	956	324	73	13	13	18	34
11	.....	.....	5,220	2,350	7,220	918	290	73	10	13	18	34
12	.....	.....	4,650	2,250	6,800	774	290	58	10	13	18	34
13	.....	.....	4,090	2,150	6,380	666	224	73	10	13	18	34
14	.....	.....	3,760	2,100	5,850	630	192	58	10	13	18	34
15	.....	.....	3,430	1,680	5,330	562	130	58	10	10	18	34
16	.....	.....	3,160	1,450	4,990	460	130	45	10	10	25	34
17	.....	.....	2,550	1,150	4,700	426	109	45	13	10	25	25
18	.....	.....	2,050	1,110	4,200	358	90	45	13	10	25	25
19	.....	.....	1,630	1,070	4,140	324	160	34	13	10	25	25
20	.....	.....	1,680	1,030	3,480	392	160	34	13	10	25	25
21	.....	.....	1,490	994	3,000	358	160	34	13	10	25	25
22	.....	.....	1,450	956	3,480	358	130	25	10	10	34	25
23	.....	.....	1,400	918	3,160	324	130	25	10	8	34	25
24	.....	.....	1,360	1,680	2,900	290	109	25	10	8	45	25
25	.....	3,760	1,310	1,910	2,600	290	90	25	10	8	45	18
26	.....	4,990	1,190	2,200	2,350	256	90	25	10	10	58	18
27	.....	5,330	1,070	2,500	2,250	224	73	25	10	10	58	18
28	.....	5,100	994	2,700	1,630	160	73	18	13	10	45	25
29	.....	4,370	1,150	2,800	1,540	192	58	18	18	8	45	25
30	.....	.....	1,150	2,550	1,360	224	73	25	25	8	45	34
31	.....	.....	1,070	.....	1,190	.....	90	25	.....	8	.....	34
1909												
1	34	40	3,000	392	3,260	4,140	426	358	34	18	109	392
2	34	90	2,600	392	1,860	3,820	290	324	34	18	90	358
3	34	90	2,100	358	1,810	3,720	290	256	34	18	90	358
4	34	109	1,770	358	1,810	3,380	256	224	34	18	73	324
5	34	160	1,490	358	1,770	2,850	2,150	192	25	18	73	324
6	30	192	1,310	4,700	1,580	2,550	2,700	130	25	13	73	290
7	30	324	1,360	4,650	1,540	2,350	5,500	109	18	13	90	250
8	25	460	1,450	4,200	1,580	2,050	5,740	90	18	13	90	230
9	25	494	1,540	3,700	3,600	1,860	5,100	90	25	13	73	216
10	25	562	1,440	3,100	3,600	2,550	3,210	90	25	13	73	200
11	20	630	1,310	3,000	3,540	2,550	2,550	90	25	13	58	200
12	20	774	1,230	4,040	3,430	2,050	2,550	73	18	13	90	426
13	20	882	1,190	6,740	2,550	1,770	3,540	73	18	13	90	666
14	25	1,030	1,070	7,580	2,420	1,720	3,050	58	18	13	109	1,070
15	25	1,110	956	6,980	2,100	1,810	2,850	45	18	13	109	1,490

DAILY DISCHARGE, IN SECOND-FEET, OF KASKASKIA RIVER AT SHELBYVILLE, ILLINOIS, FOR 1908–11—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
16	25	1,190	846	6,440	1,680	1,540	2,550	34	18	13	426	1,580
17	25	1,490	1,030	5,910	1,310	1,910	2,900	34	18	13	392	1,540
18	30	2,100	738	5,500	1,150	1,450	3,480	25	18	25	666	1,450
19	34	2,650	702	4,930	1,030	1,150	3,600	25	18	58	666	1,150
20	45	3,210	666	4,090	882	774	3,260	25	18	73	666	1,000
21	58	3,380	630	5,620	528	630	2,550	25	18	73	738	850
22	73	3,430	562	6,440	702	596	2,450	18	18	58	956	700
23	90	3,480	494	6,980	666	596	1,860	13	18	130	918	600
24	90	3,760	562	5,500	596	528	1,450	13	58	130	882	520
25	90	3,820	596	5,450	702	528	666	13	58	130	846	470
26	73	3,820	630	5,220	1,360	738	702	25	34	130	702	400
27	73	3,600	596	4,590	2,200	702	630	18	25	130	630	350
28	73	3,260	494	3,600	2,100	666	528	18	25	130	562	300
29	60	.....	494	3,540	2,200	562	426	34	25	130	494	250
30	50	.....	460	2,600	2,900	528	392	34	25	130	426	220
31	40	.....	426	.....	3,760	.....	358	45	.....	109	.....	200
1910												
1	250	774	3,700	290	392	1,450	738	1,150	58	208	66	1,420
2	250	702	3,160	290	358	1,270	774	937	90	176	90	1,050
3	300	738	3,260	256	596	1,110	882	630	66	160	100	720
4	300	702	3,380	256	738	994	494	375	90	176	82	684
5	300	702	3,430	256	882	994	774	290	100	224	90	596
6	300	666	2,400	256	846	846	630	224	1,150	579	82	511
7	300	630	2,150	224	1,230	702	545	273	1,630	975	90	341
8	300	666	1,810	224	1,540	596	409	160	3,180	1,070	82	341
9	350	596	1,580	160	1,580	562	290	100	2,500	937	66	375
10	400	562	1,360	160	1,230	494	224	109	1,840	774	66	392
11	500	528	1,150	160	1,860	494	224	90	1,450	613	66	341
12	738	460	994	192	2,200	426	176	82	1,030	511	82	307
13	1,860	324	994	192	2,150	392	409	90	756	460	90	341
14	3,160	426	774	192	1,860	324	392	66	666	392	66	375
15	3,600	426	666	192	1,680	290	358	73	777	307	66	358
16	3,380	426	630	324	1,490	290	774	494	426	392	66	307
17	2,900	358	596	358	1,270	256	1,050	720	341	273	66	273
18	4,260	290	562	358	1,030	256	1,470	994	290	240	73	208
19	5,330	358	528	358	882	256	1,270	756	208	224	66	208
20	6,260	324	494	358	846	224	1,030	630	192	208	66	224
21	4,540	494	426	358	774	160	846	358	176	256	66	176
22	3,650	460	426	324	1,070	109	579	307	145	208	66	176
23	3,380	460	426	324	3,700	109	409	290	160	176	73	208
24	2,700	392	392	290	4,310	109	358	545	176	192	66	341
25	2,200	358	392	290	4,870	109	273	426	358	145	66	290
26	1,860	358	358	290	4,650	109	160	290	307	160	66	208
27	1,490	2,550	358	324	3,260	256	160	208	273	145	3,510	145
28	1,230	3,380	358	358	2,850	392	176	192	256	145	3,600	756
29	1,110	.....	324	426	2,700	494	256	100	240	130	2,420	1,520
30	994	.....	324	392	2,300	666	756	90	224	100	1,720	1,360
31	882	.....	290	.....	1,810	.....	1,110	66	.....	90	.....	1,170
1911												
1	1,150	2,850	918	494	1,810	208	22	12	16	8,450	918	918
2	1,190	2,750	846	494	1,680	192	45	13	12	8,000	810	882
3	1,100	2,550	774	702	1,470	160	30	16	12	7,430	596	846
4	1,000	1,810	738	1,720	1,270	145	34	18	13	6,590	666	810
5	950	1,400	702	3,920	1,050	160	22	18	16	6,150	738	774
6	910	1,360	666	6,440	956	145	25	22	22	5,560	774	702
7	860	1,310	1,360	3,920	846	160	25	25	40	4,650	702	494
8	810	1,270	2,400	3,260	756	160	22	22	82	4,090	666	528
9	760	882	2,450	3,160	702	145	25	18	73	3,260	666	596
10	714	846	2,300	2,750	666	160	22	16	40	2,700	702	666
11	666	956	2,050	2,350	613	130	90	12	273	2,300	738	702
12	494	882	1,910	1,910	562	120	22	12	720	2,050	1,720	738
13	1,810	774	1,680	1,680	511	109	18	12	2,180	1,720	1,860	738
14	4,090	494	1,450	4,040	494	90	18	12	1,450	1,540	1,960	774
15	4,650	956	1,150	5,100	460	73	16	13	1,050	1,360	1,860	810
16	3,540	1,070	1,030	4,820	409	66	13	12	1,250	1,190	1,810	810
17	2,350	1,230	918	4,260	392	73	13	9	1,520	1,150	2,700	846
18	1,810	1,540	810	3,430	358	52	12	9	1,130	1,070	2,800	810
19	1,680	1,810	738	3,160	341	58	18	9	1,110	994	2,850	774
20	1,490	1,860	702	2,680	426	52	16	10	1,130	1,190	2,600	882
21	1,270	1,720	666	2,150	975	58	18	9	864	1,630	2,500	1,030
22	1,270	1,540	596	1,700	630	58	18	7	720	2,050	2,350	1,150
23	1,030	1,400	562	1,450	562	52	12	5.5	579	2,100	2,200	810
24	918	1,270	528	1,230	477	58	13	22	494	2,200	1,960	1,230
25	774	1,230	494	1,090	392	52	12	25	2,120	2,300	1,720	1,190
26	846	1,230	528	994	324	90	13	30	2,980	2,450	1,540	1,270
27	1,070	1,150	596	864	240	82	12	40	2,780	2,100	1,400	1,190

DAILY DISCHARGE, IN SECOND-FEET, OF KASKASKIA RIVER AT SHELBYVILLE, ILLINOIS, FOR 1908–11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1911												
28	2,800	1,030	562	918	224	73	13	30	5,070	1,580	1,230	1,150
29	3,160	.....	562	918	273	45	13	22	6,920	1,400	1,110	1,070
30	3,050	.....	562	1,340	256	30	12	25	8,750	1,190	994	994
31	2,950	.....	494	.....	256	.....	13	16	.....	1,030	.....	1,110

NOTE—Discharge estimated because of ice January 6 to 18, January 29 to February 1, December 7 to 11, and 20 to 31, 1909, and for January 1 to 11, 1910, and January 3 to 10, 1911. Discharges on May 13, 1908, April 16, 22, 1909, January 20, 1910, as published in U. S. Geological Survey Water Supply Papers No. 245, 265 and 285; and in the report of the Internal Improvement Commission of Illinois on Surface Water, 1908-1910, are 100 second-feet in error. The relation of gage height to discharge during high water is liable to be affected by backwater caused by drift lodging at the two railroad bridges below the gaging station.

MONTHLY DISCHARGE OF KASKASKIA RIVER AT SHELBYVILLE, ILLINOIS, FOR 1908–11

[Drainage area, 1,030 square miles]

Month	Discharge in second-feet				Runoff depth in inches on drainage area	Accuracy
	Maximum	Minimum	Mean	Per square mile		
1908						
February 25-29	5,330	3,760	4,710	4.57	0.85	B.
March	5,330	994	3,010	2.92	3.37	B.
April	3,000	918	1,920	1.86	2.08	A.
May	10,600	1,190	4,730	4.59	5.29	B.
June	1,110	160	572	.555	.62	B.
July	426	58	187	.182	.21	B.
August	90	18	45.5	.044	.05	C.
September	34	10	14.7	.014	.02	C.
October	25	8	11.8	.011	.01	C.
November	58	8	26.4	.026	.03	C.
December	34	18	27.8	.027	.03	C.
1909						
January	90	.....	43.4	.042	.05	C.
February	3,820	.....	1,650	1.60	1.67	B.
March	3,000	426	1,090	1.06	1.22	B.
April	7,580	358	4,230	4.12	4.60	B.
May	3,760	528	1,940	1.88	2.17	B.
June	4,140	528	1,740	1.69	1.89	B.
July	5,740	256	2,190	2.13	2.46	B.
August	358	13	83.9	.081	.09	B.
September	58	18	25.4	.025	.03	C.
October	130	13	54.3	.053	.06	C.
November	956	58	375	.364	.41	B.
December	1,580	.....	593	.576	.66	C.
The year	7,580	.....	1,170	1.14	15.31	
1910						
January	6,360	.....	1,910	1.86	2.14	C.
February	3,380	290	682	.662	.69	B.
March	3,700	290	1,220	1.18	1.36	B.
April	426	160	281	.273	.30	A.
May	4,870	358	1,840	1.79	2.06	B.
June	1,450	109	491	.477	.53	A.
July	1,470	160	581	.564	.65	A.
August	1,150	66	359	.349	.40	A.
September	3,180	58	638	.619	.69	A.
October	1,070	90	343	.333	.38	A.
November	3,600	66	439	.426	.48	A.
December	1,520	145	507	.492	.57	C.
The year	6,360	58	778	.755	10.25	
1911						
January	4,650	494	1,650	1.60	1.84	B.
February	2,850	494	1,400	1.36	1.42	A.

MONTHLY DISCHARGE OF KASKASKIA RIVER AT SHELBYVILLE, ILLINOIS, FOR 1908-11—*Concluded*

Month	Discharge in second-feet				Runoff—depth in inches on drainage area	Accuracy
	Maximum	Minimum	Mean	Per square mile		
1911						
March	2,450	494	1,020	.990	1.14	A.
April	6,540	494	2,430	2.36	2.63	A.
May	1,810	224	657	.638	.74	A.
June	208	30	102	.099	.11	B.
July	90	12	21.2	.021	.02	C.
August	40	5.5	16.8	.016	.02	C.
September	8,750	12	1,450	1.41	1.57	A.
October	8,450	994	2,950	2.86	3.30	A.
November	2,850	596	1,500	1.46	1.63	A.
December	1,270	494	880	.854	.98	A.
The year	8,750	5.5	1,170	1.14	15.40	

NOTE—Mean discharge for April, 1909, and the yearly mean for 1909, as published in United States Geological Survey Water Supply Papers No. 245, 265 and 285, are in error, see foot-note to table of discharge.

KASKASKIA RIVER AT CARLYLE, ILLINOIS

Location.—At the Baltimore and Ohio Southwestern Railroad bridge about one-fourth mile east of the railroad station at Carlyle, Ill.

Records available.—March 2, 1908, to December 31, 1911.

Drainage area.—Two thousand six hundred and eighty square miles.

Gage.—Standard chain gage attached to bridge; datum unchanged.

Channel.—Probably shifting. Measurements to date indicate that the point of control is probably permanent. Main channel is broken by three bridge piers and flood channel by four additional ones.

Discharge measurements.—Made from downstream side of bridge.

Floods.—The flood of 1882, which is the highest known, is said to have reached a height of 1½ feet higher than the flood of 1908, or 32.5 feet on the present gage.

Winter flow.—Ice may affect the relation between gage height and discharge during portions of December, January, and February.

Regulation.—A dam 3½ feet high and about 700 feet above the section is used for water supply purposes for the city of Carlyle. The average amount pumped is 3,500,000 gallons every 30 days, and during June, July, and August, 4,500,000 gallons every 30 days. The outfalls of one section of the city sewage system and some private sewers are above the section, so that the diversion is negligible.

DISCHARGE MEASUREMENTS OF KASKASKIA RIVER AT CARLYLE, ILLINOIS, IN 1908-11

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1908		*Feet*	*Square feet*	*Feet*	*Second-feet*
March 23	R. J. Taylor	196	1,770	16.7	2,830
May 4	R. J. Taylor	512	3,770	21.35	5,360
July 8	R. J. Taylor	131	335	8.1	426
August 7	R. J. Taylor	124	239	7.1	289
September 24	R. J. Taylor			5.6	*62
October 22	R. J. Taylor			5.6	*32

DISCHARGE MEASUREMENTS OF KASKASKIA RIVER, AT CARLYLE, ILLINOIS, IN 1908-11—*Concluded*

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1909		*Feet*	*Square feet*	*Feet*	*Second-feet*
February 22	R. J. Taylor	514	3,660	20.70	4,710
March 15	W. M. O'Neill	531	4,480	22.29	7,110
March 25	W. M. O'Neill	149	773	10.86	1,260
May 7	H. J. Jackson	177	1,540	15.36	2,640
October 28	H. J. Jackson	129	276	7.32	395
November 18	H. J. Jackson	228	2,080	17.77	3,870
November 19	H. J. Jackson	229	2,120	17.84	3,880
December 2	H. J. Jackson	142	595	9.63	939
December 4	H. J. Jackson	139	520	9.11	801
1910					
March 25	H. J. Jackson	139	531	9.24	818
May 20	C. T. Bailey	158	1,020	12.70	1,840
May 27	C. T. Bailey	522	3,510	20.52	4,710
May 29	C. T. Bailey	526	3,910	21.17	5,310
June 2	C. T. Bailey	526	4,040	21.76	6,150
June 6	C. T. Bailey	198	2,150	18.92	3,890
June 7	C. T. Bailey	198	1,900	17.66	3,310
June 8	C. T. Bailey	166	1,160	13.63	1,940
July 30	H. J. Jackson	132	356	8.05	561
December 7	Bailey and Monk	139	550	9.62	846
December 20	P. S. Monk	128	293	7.64	440
1911					
March 16	P. S. Monk	173	1,730	16.62	3,010
October 19	Monk and Brown	230	2,090	18.38	3,160
November 2	P. S. Monk	154	884	12.24	1,470

* Discharge partly estimated.

DAILY GAGE HEIGHT, IN FEET, OF KASKASKIA RIVER AT CARLYLE, ILLINOIS, FOR 1908-11

[Mike Schilling, observer]

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1	.....	.....	.....	13.9	22.2	19.1	8.0	7.5	6.1	5.6	5.6	5.6
2	.....	.....	23.7	16.1	22.1	15.6	8.2	7.3	6.0	5.6	5.6	5.6
3	.....	.....	23.6	17.6	21.8	13.3	8.2	7.0	6.0	5.6	5.6	5.9
4	.....	.....	23.3	18.2	21.3	12.5	8.1	6.8	5.9	5.6	5.6	5.9
5	.....	.....	23.1	18.5	21.8	11.9	8.0	6.7	5.8	5.6	5.6	5.9
6	.....	.....	22.9	18.4	23.1	11.6	8.1	7.1	5.8	5.6	5.6	5.9
7	.....	.....	22.8	18.0	24.9	11.7	8.1	7.1	5.9	5.6	5.6	5.9
8	.....	.....	22.8	18.0	29.1	11.2	8.0	7.2	5.9	5.6	5.6	5.9
9	.....	.....	22.8	19.0	30.8	11.1	8.0	6.9	5.8	5.6	5.6	5.7
10	.....	.....	23.1	19.9	30.0	11.9	7.7	6.7	5.9	5.6	5.6	5.7
11	.....	.....	23.6	20.7	28.8	11.0	8.5	6.7	5.7	5.6	5.6	5.7
12	.....	.....	23.7	21.2	27.3	10.6	8.2	6.5	5.7	5.6	5.6	5.7
13	.....	.....	23.4	21.5	26.3	10.6	8.0	6.6	5.7	5.6	5.6	5.7
14	.....	.....	23.3	21.5	25.5	10.5	8.0	6.6	5.7	5.6	5.6	5.7
15	.....	.....	23.0	21.3	24.9	10.4	7.8	6.5	5.7	5.6	5.6	5.7
16	.....	.....	22.7	20.5	24.4	9.8	7.6	6.5	5.6	5.6	5.6	5.7
17	.....	.....	22.4	19.1	24.0	9.7	7.7	6.5	5.7	5.6	5.6	5.7
18	.....	.....	22.2	17.1	23.6	9.4	7.9	6.4	5.7	5.6	5.6	5.7
19	.....	.....	21.9	15.9	23.3	9.1	7.8	6.4	5.6	5.6	5.6	5.7
20	.....	.....	21.6	14.8	23.0	8.9	8.2	6.4	5.7	5.6	5.6	5.7
21	.....	.....	20.8	14.0	22.7	9.3	8.1	6.3	5.7	5.6	5.6	5.7
22	.....	.....	18.3	12.8	23.1	10.3	8.6	6.1	5.6	5.6	5.6	5.6
23	.....	.....	16.6	12.3	22.9	10.3	9.3	6.0	5.7	5.6	5.6	5.6
24	.....	.....	14.9	15.4	22.7	9.3	9.2	6.0	5.7	5.6	5.6	5.6
25	.....	.....	13.6	18.1	22.5	9.0	8.3	5.9	5.6	5.6	5.6	5.6
26	.....	.....	13.1	19.9	22.2	8.6	8.5	5.9	5.6	5.6	5.6	5.6
27	.....	.....	12.6	21.2	22.0	8.5	9.4	5.9	5.6	5.6	5.6	5.6
28	.....	.....	12.3	21.7	21.9	8.4	9.3	5.9	5.6	5.6	5.6	5.6
29	.....	.....	12.7	22.0	21.8	8.5	8.2	6.1	5.6	5.6	5.6	5.6
30	.....	.....	12.8	22.2	21.8	8.3	8.0	6.5	5.6	5.6	5.6	5.6
31	.....	.....	12.9	.....	20.6	.....	7.6	6.5	.....	5.6	.....	5.6
1909												
1	5.6	7.0	21.4	9.9	22.2	15.3	9.7	10.3	5.75	5.85	6.6	10.0
2	5.6	7.2	21.3	9.2	22.1	17.2	9.3	11.8	5.75	5.7	6.5	9.65
3	5.6	7.5	20.9	9.2	22.0	17.6	8.8	10.3	5.75	5.7	6.45	9.3
4	5.6	7.5	20.7	9.4	21.5	18.7	8.6	8.9	5.7	5.7	6.45	9.05
5	5.6	7.5	20.2	9.4	21.2	19.3	8.1	8.4	5.7	5.65	6.5	8.9

DAILY GAGE HEIGHT, IN FEET, OF KASKASKIA RIVER AT CARLYLE, ILLINOIS, FOR 1908-11—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
6	5.6	8.7	19.9	9.9	21.0	19.5	8.5	8.1	5.7	5.6	6.55	8.75
7	5.6	9.1	19.9	12.8	15.5	19.8	12.0	7.8	5.7	5.6	7.6	8.8
8	5.6	9.4	20.4	17.2	13.8	19.9	15.0	7.5	5.7	5.6	6.95	8.8
9	5.6	10.4	20.8	18.5	14.6	19.8	17.0	7.4	5.7	5.55	10.0	8.65
10	5.6	10.7	21.2	19.3	16.8	18.6	18.0	7.3	5.7	5.55	10.95	7.95
11	5.6	11.1	21.9	19.8	18.4	16.2	18.6	7.1	10.3	5.55	8.9	8.75
12	5.7	12.1	22.9	20.0	19.0	15.6	19.1	7.0	8.8	5.5	8.5	13.5
13	5.7	12.3	22.9	23.2	19.6	16.0	19.7	6.9	7.1	5.5	9.8	18.6
14	5.7	12.7	19.9	24.3	20.0	16.5	20.1	6.8	6.4	5.4	12.2	18.95
15	5.7	13.4	18.0	25.0	20.4	17.4	20.6	6.75	6.1	5.4	16.2	19.7
16	5.7	14.5	13.2	25.3	20.6	17.8	21.0	6.6	6.4	5.4	14.1	20.1
17	5.7	14.7	12.5	25.4	20.9	16.6	21.3	6.5	6.6	5.9	15.45	19.6
18	5.7	15.1	12.0	25.4	20.9	15.5	21.6	6.4	6.4	6.1	17.7	17.45
19	5.7	16.9	11.9	25.0	18.6	17.3	21.9	6.35	6.0	7.4	18.0	14.85
20	5.7	19.0	11.8	24.2	15.0	17.8	22.0	6.3	5.8	9.6	14.65	14.45
21	5.7	19.4	11.8	24.1	12.7	16.6	22.0	6.2	5.85	9.4	12.0	13.7
22	5.9	19.8	11.5	24.1	11.8	12.6	21.8	6.15	5.9	8.9	11.65	13.05
23	5.9	20.4	11.2	24.1	11.0	10.8	21.4	6.1	8.0	8.3	14.9	12.7
24	5.9	20.7	11.2	24.1	10.6	10.0	20.6	6.1	8.9	8.4	18.4	12.7
25	6.1	21.2	11.2	24.1	10.2	9.8	18.6	6.0	8.0	8.4	19.1	12.6
26	6.1	21.4	11.3	24.0	11.0	9.4	15.0	6.0	7.2	8.3	19.0	11.9
27	6.3	21.9	11.3	24.0	12.3	9.5	12.7	6.0	6.4	7.7	16.25	10.85
28	6.6	21.9	11.0	23.8	13.2	9.8	11.5	5.95	6.1	7.2	13.6	10.7
29	6.6	.....	10.7	23.6	13.3	10.0	10.5	5.9	6.0	6.9	11.2	9.95
30	6.7	.....	10.6	23.0	13.6	9.9	9.9	5.85	5.9	6.7	10.5	9.65
31	6.8	.....	10.2	.....	13.9	.....	9.6	5.75	.....	6.6	.....	9.65
1910												
1	9.6	13.7	22.1	8.3	9.2	21.8	8.7	8.8	7.0	8.2	6.9	13.25
2	10.0	12.5	23.8	8.2	8.9	21.7	8.4	9.3	6.9	7.8	6.85	14.5
3	10.3	12.0	24.8	8.1	8.7	21.5	8.6	9.8	6.7	7.5	6.8	14.05
4	10.7	12.7	24.5	8.0	10.0	20.6	9.8	10.0	7.6	7.35	6.65	12.8
5	11.4	13.7	24.1	8.1	11.3	19.7	11.9	10.2	9.1	7.7	6.65	11.45
6	11.6	12.8	23.6	8.2	12.4	18.9	14.1	9.6	9.9	15.9	6.55	10.1
7	12.3	11.9	23.0	8.3	12.2	17.0	13.2	8.9	11.0	19.25	6.7	9.5
8	12.4	11.2	22.6	8.3	13.5	13.9	12.3	8.2	13.4	20.3	6.75	9.0
9	10.5	10.7	22.2	8.1	15.0	12.4	11.0	7.8	15.2	20.95	6.8	8.8
10	11.5	10.5	17.3	7.9	16.3	11.3	10.5	7.6	15.9	21.5	6.8	8.6
11	11.0	10.3	16.1	7.8	16.0	10.7	9.6	7.4	15.8	21.7	6.65	8.4
12	10.9	10.0	14.8	7.7	15.0	10.2	9.2	7.2	15.1	19.9	6.65	8.2
13	16.0	9.8	13.2	7.6	17.1	9.8	8.7	7.1	14.0	17.7	6.55	8.0
14	19.4	9.6	13.0	7.5	18.2	9.4	8.4	6.95	13.1	12.9	6.5	7.8
15	20.4	9.4	12.2	7.5	18.4	9.2	8.2	6.8	11.9	10.9	6.5	7.7
16	21.0	9.5	11.5	8.7	18.6	9.0	10.3	6.7	10.8	10.5	6.4	7.6
17	21.5	9.9	11.0	10.1	17.1	8.8	14.6	7.2	9.7	10.15	6.4	7.5
18	21.6	10.4	10.6	11.4	15.7	8.6	18.4	7.9	8.5	9.9	6.3	7.45
19	21.8	11.1	10.3	11.2	13.5	8.4	19.2	9.0	8.3	9.4	6.26	7.4
20	21.9	10.5	10.1	10.7	12.6	8.2	19.6	9.7	8.1	8.85	6.3	7.45
21	22.0	10.2	10.0	9.8	11.8	8.0	19.9	10.4	7.9	8.4	6.2	7.3
22	22.1	10.6	9.7	9.3	13.7	7.9	19.1	11.2	7.8	7.85	6.25	7.2
23	22.0	11.8	9.6	8.9	18.0	7.8	17.9	11.6	7.7	7.8	6.15	7.1
24	21.9	13.5	9.5	8.7	19.0	7.75	14.6	12.3	7.6	7.7	6.15	7.05
25	21.8	13.6	9.25	8.5	19.6	7.5	12.2	9.9	7.5	7.55	6.15	7.0
26	21.6	12.2	9.2	8.4	20.2	7.4	10.3	8.5	7.4	7.5	6.1	6.95
27	21.5	16.1	9.05	8.5	20.6	7.8	9.4	8.3	8.0	7.35	7.0	6.9
28	21.4	20.9	8.9	9.2	20.9	8.4	8.8	8.2	8.6	7.3	7.25	7.1
29	20.9	.....	8.7	9.9	21.3	10.8	8.3	8.1	9.2	7.2	8.05	7.4
30	17.8	.....	8.6	9.6	21.6	9.6	8.1	7.7	8.4	7.05	11.2	7.9
31	15.7	.....	8.4	.....	21.9	.....	8.4	7.4	.....	7.0	.....	9.5
1911												
1	10.9	18.6	18.95	10.3	19.8	7.7	6.2	.....	5.8	18.6	12.6	13.7
2	12.3	18.2	16.7	9.9	20.8	7.7	6.1	.....	5.8	20.2	12.0	12.7
3	13.8	17.8	14.2	9.8	21.4	7.5	6.0	.....	5.7	20.5	11.4	12.1
4	15.1	16.9	12.85	10.5	21.7	7.45	5.95	.....	5.75	24.4	11.0	11.8
5	16.3	16.1	11.9	13.4	21.8	7.2	5.9	.....	5.7	26.6	10.5	11.5
6	15.7	15.0	11.55	17.4	21.6	7.15	6.0	.....	5.6	27.1	10.6	11.3
7	14.3	14.7	11.6	18.5	19.8	7.0	5.95	.....	5.6	27.2	12.5	10.9
8	13.2	15.5	15.9	19.0	17.7	6.9	5.9	5.6	5.9	26.8	13.3	10.7
9	12.8	15.6	18.65	19.4	13.6	6.8	5.85	5.55	6.5	26.2	12.7	10.5
10	12.3	15.1	19.4	19.6	11.9	6.7	5.8	.....	6.9	25.5	12.1	10.5
11	11.9	13.55	20.0	19.5	11.1	6.65	5.75	5.7	7.6	25.0	11.7	11.9
12	11.4	12.6	20.5	19.3	10.7	6.0	5.7	5.9	7.8	24.5	12.2	14.3
13	10.7	11.75	20.7	19.0	10.4	6.0	6.0	5.8	8.1	24.1	16.8	14.3
14	9.9	11.5	20.6	19.1	9.8	6.5	5.9	5.7	8.0	23.5	18.6	12.7
15	10.8	11.6	19.4	19.9	9.7	6.6	5.85	5.6	7.0	23.2	19.1	11.6
16	14.7	11.95	16.75	20.7	9.4	6.55	5.75	5.7	14.2	22.7	19.0	11.5
17	17.4	13.1	14.0	20.9	9.0	6.4	5.65	5.8	15.4	21.8	19.4	13.7
18	18.6	14.75	12.8	21.2	8.95	6.35	5.6	5.9	16.7	21.0	19.1	16.1

DAILY GAGE HEIGHT, IN FEET, OF KASKASKIA RIVER AT CARLYLE, ILLINOIS, FOR 1908–11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1911												
19	19.0	15.8	12.05	21.5	8.7	6.3	5.6	5.8	18.8	18.2	18.9	15.7
20	18.6	16.9	11.9	21.55	8.55	6.25	5.55	5.7	19.1	15.0	19.4	14.0
21	16.2	18.05	10.75	21.55	8.4	6.15	.....	5.6	19.2	12.9	19.9	15.2
22	14.4	18.9	10.1	21.6	8.3	6.1	.....	5.55	19.0	13.4	20.1	17.9
23	12.8	19.35	10.6	21.7	12.7	6.15	.....	.....	18.3	17.1	20.4	18.6
24	12.4	18.9	10.25	21.65	13.3	6.1	.....	.....	17.2	18.1	20.2	18.4
25	12.0	17.8	10.0	21.0	11.8	6.05	.....	.....	16.6	18.9	19.5	16.6
26	11.5	17.65	10.05	19.3	9.7	6.15	.....	.....	15.8	19.1	18.2	14.5
27	11.0	17.2	10.4	15.7	8.9	8.0	.....	.....	16.1	18.6	17.1	14.3
28	11.0	18.9	13.4	13.2	8.5	7.1	.....	.....	16.5	17.6	15.1	14.3
29	13.7	.....	13.95	12.2	8.2	6.4	5.6	5.5	16.9	15.1	14.7	15.6
30	17.8	.....	12.3	14.3	7.9	6.3	5.55	5.6	17.7	14.2	14.3	14.4
31	18.4	.....	10.95	.....	7.85	.....	.....	5.7	.....	13.4	.....	13.6

NOTE—Ice conditions existed December 8–31, 1909, and January 1–4, 1910. Gage read to top of ice December 25–31, 1909. July 21–28, July 31–August 7, August 10, and August 23–28, 1911, dry beneath gage; reading 5.5.

RATING TABLE FOR KASKASKIA RIVER AT CARLYLE, ILLINOIS, FROM MARCH 2, 1908–DECEMBER 31, 1911

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
5.40	23	10.20	1,092	15.00	2,420	19.80	4,212
5.50	35	10.30	1,098	15.10	2,451	19.90	4,270
5.60	47	10.40	1,124	15.20	2,482	20.00	4,330
5.70	59	10.50	1,150	15.30	2,513	20.10	4,390
5.80	72	10.60	1,176	15.40	2,544	20.20	4,460
5.90	86	10.70	1,202	15.50	2,575	20.30	4,530
6.00	100	10.80	1,228	15.60	2,606	20.40	4,610
6.10	116	10.90	1,254	15.70	2,637	20.50	4,690
6.20	132	11.00	1,280	15.80	2,668	20.60	4,770
6.30	148	11.10	1,307	15.90	2,699	20.70	4,860
6.40	166	11.20	1,334	16.00	2,730	20.80	4,950
6.50	184	11.30	1,361	16.10	2,763	20.90	5,050
6.60	202	11.40	1,388	16.20	2,796	21.00	5,150
6.70	220	11.50	1,415	16.30	2,829	21.10	5,260
6.80	240	11.60	1,442	16.40	2,862	21.20	5,380
6.90	260	11.70	1,469	16.50	2,895	21.30	5,520
7.00	280	11.80	1,496	16.60	2,928	21.40	5,660
7.10	302	11.90	1,523	16.70	2,961	21.50	5,810
7.20	324	12.00	1,550	16.80	2,994	21.60	5,962
7.30	346	12.10	1,578	16.90	3,027	21.70	6,114
7.40	370	12.20	1,606	17.00	3,060	21.80	6,266
7.50	394	12.30	1,634	17.10	3,094	21.90	6,418
7.60	418	12.40	1,662	17.20	3,128	22.00	6,570
7.70	442	12.50	1,690	17.30	3,162	22.10	6,722
7.80	466	12.60	1,718	17.40	3,196	22.20	6,874
7.90	490	12.70	1,746	17.50	3,230	22.30	7,026
8.00	515	12.80	1,774	17.60	3,264	22.40	7,178
8.10	540	12.90	1,802	17.70	3,298	22.50	7,330
8.20	565	13.00	1,830	17.80	3,332	22.60	7,482
8.30	590	13.10	1,859	17.90	3,366	22.70	7,634
8.40	615	13.20	1,888	18.00	3,400	22.80	7,786
8.50	640	13.30	1,917	18.10	3,435	22.90	7,938
8.60	665	13.40	1,946	18.20	3,471	23.00	8,090
8.70	690	13.50	1,975	18.30	3,508	23.10	8,242
8.80	715	13.60	2,004	18.40	3,546	23.20	8,394
8.90	740	13.70	2,033	18.50	3,585	23.30	8,546
9.00	765	13.80	2,062	18.60	3,626	23.40	8,698
9.10	790	13.90	2,091	18.70	3,668	23.50	8,850
9.20	815	14.00	2,120	18.80	3,711	23.60	9,002
9.30	840	14.10	2,150	18.90	3,755	23.70	9,154
9.40	865	14.20	2,180	19.00	3,800	23.80	9,306
9.50	890	14.30	2,210	19.10	3,846	23.90	9,458
9.60	916	14.40	2,240	19.20	3,893	24.00	9,610
9.70	942	14.50	2,270	19.30	3,942	24.10	9,762
9.80	968	14.60	2,300	19.40	3,993	24.20	9,914
9.90	994	14.70	2,330	19.50	4,046	24.30	10,066
10.00	1,020	14.80	2,360	19.60	4,100	24.40	10,218
10.10	1,046	14.90	2,390	19.70	4,155	24.50	10,370

RATING TABLE FOR KASKASKIA RIVER AT CARLYLE, ILLINOIS, FROM MARCH 2, 1908–DECEMBER 31, 1911—*Concluded*

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
24.60	10,522	24.90	10,978	27.00	14,170	30.00	18,730
24.70	10,674	25.00	11,130	28.00	15,690	31.00	20,250
24.80	10,826	26.00	12,650	29.00	17,210		

NOTE—The above table is not applicable for ice or obstructed channel conditions. It is based on 30 discharge measurements made during 1908–11 and is poorly defined up to 5.7 feet. From 5.8 to 22.4 feet it is well defined and above 22.4 feet the rating curve is extended as a tangent, the difference being 152 per tenth.

DAILY DISCHARGE, IN SECOND-FEET, OF KASKASKIA RIVER AT CARLYLE, ILLINOIS, FOR 1908–11

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1	.....	.....	.....	2,090	6,870	3,850	515	394	116	47	47	47
2	.....	.....	9,150	2,760	6,720	2,610	565	346	100	47	47	47
3	.....	.....	9,000	3,260	6,270	1,920	565	280	100	47	47	86
4	.....	.....	8,550	3,470	5,510	1,690	540	240	86	47	47	86
5	.....	.....	8,240	3,580	6,270	1,520	515	220	72	47	47	86
6	.....	.....	7,940	3,550	8,240	1,440	540	302	72	47	47	86
7	.....	.....	7,790	3,400	11,800	1,470	540	302	86	47	47	86
8	.....	.....	7,790	3,400	17,400	1,330	515	324	86	47	47	86
9	.....	.....	7,790	3,800	19,900	1,310	515	260	72	47	47	59
10	.....	.....	8,240	4,270	18,700	1,520	442	220	86	47	47	59
11	.....	.....	9,000	4,860	16,900	1,280	640	220	59	47	47	59
12	.....	.....	9,150	5,380	14,600	1,180	565	184	59	47	47	59
13	.....	.....	8,700	5,810	13,100	1,180	515	202	59	47	47	59
14	.....	.....	8,550	5,810	11,900	1,150	515	202	59	47	47	59
15	.....	.....	8,090	5,520	11,000	1,120	466	184	59	47	47	59
16	.....	.....	7,630	4,690	10,200	968	418	184	47	47	47	59
17	.....	.....	7,180	3,850	9,610	942	442	184	59	47	47	59
18	.....	.....	6,870	3,090	9,000	865	490	166	59	47	47	59
19	.....	.....	6,420	2,700	8,550	790	466	166	47	47	47	59
20	.....	.....	5,960	2,360	8,090	740	565	166	59	47	47	59
21	.....	.....	4,950	2,120	7,630	840	540	148	59	47	47	59
22	.....	.....	3,510	1,770	8,240	1,100	665	116	47	47	47	47
23	.....	.....	2,930	1,630	7,940	1,100	840	100	59	47	47	47
24	.....	.....	2,390	2,540	7,630	840	815	100	59	47	47	47
25	.....	.....	2,000	3,440	7,330	765	590	86	47	47	47	47
26	.....	.....	1,860	4,270	6,870	665	640	86	47	47	47	47
27	.....	.....	1,720	5,380	6,570	640	865	86	47	47	47	47
28	.....	.....	1,630	6,110	6,420	615	840	86	47	47	47	47
29	.....	.....	1,750	6,570	6,270	640	565	116	47	47	47	47
30	.....	.....	1,770	6,870	6,270	590	515	184	47	47	47	47
31	.....	.....	1,800	.....	4,770	.....	418	184	.....	47	.....	47
1909												
1	47	280	5,660	994	6,870	2,510	942	1,100	66	79	202	1,020
2	47	324	5,520	815	6,720	3,130	840	1,500	66	59	184	929
3	47	394	5,050	815	6,570	3,260	715	1,100	66	59	175	840
4	47	394	4,860	865	5,810	3,670	665	740	59	59	175	778
5	47	394	4,460	865	5,380	3,940	540	615	59	53	184	740
6	47	690	4,270	994	5,150	4,050	640	540	59	47	193	702
7	47	790	4,270	1,770	2,580	4,210	1,550	466	59	47	418	715
8	47	865	4,610	3,130	2,060	4,270	2,420	394	59	47	270	600
9	47	1,120	4,950	3,580	2,300	4,210	3,060	370	59	41	1,020	600
10	47	1,200	5,380	3,940	2,990	3,630	3,400	346	59	41	1,270	800
11	47	1,310	6,420	4,210	3,550	2,800	3,630	302	1,100	41	740	702
12	59	1,580	7,940	4,330	3,800	2,610	3,850	280	715	35	640	1,980
13	59	1,630	7,940	8,390	4,100	2,730	4,160	260	302	35	968	3,630
14	59	1,750	4,270	10,100	4,330	2,900	4,390	240	166	23	1,610	3,780
15	59	1,950	3,400	11,100	4,610	3,200	4,770	230	116	23	2,800	4,160
16	59	2,270	1,890	11,600	4,770	3,330	5,150	202	166	23	2,150	4,390
17	59	2,330	1,690	11,700	5,050	2,930	5,520	184	202	86	2,560	4,100
18	59	2,450	1,550	11,700	5,050	2,580	5,960	166	166	116	3,300	3,210
19	59	3,030	1,520	11,100	3,630	3,160	6,420	157	100	370	3,400	2,380
20	59	3,800	1,500	9,910	2,420	3,330	6,570	148	72	916	2,320	2,260
21	59	3,990	1,500	9,760	1,750	2,930	6,570	132	79	865	1,550	2,030
22	86	4,210	1,420	9,760	1,500	1,720	6,270	124	86	740	1,460	1,840
23	86	4,610	1,330	9,760	1,280	1,230	5,660	116	515	590	2,390	1,570
24	86	4,860	1,330	9,760	1,180	1,020	4,770	116	740	615	3,550	1,440
25	116	5,380	1,330	9,760	1,070	968	3,630	100	515	615	3,850	1,300

DAILY DISCHARGE, IN SECOND-FEET, OF KASKASKIA RIVER AT CARLYLE, ILLINOIS, FOR 1908–11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
26	116	5,660	1,360	9,610	1,280	865	2,420	100	324	590	3,800	1,200
27	148	6,420	1,360	9,610	1,630	890	1,750	100	166	442	2,810	1,100
28	202	6,420	1,280	9,310	1,890	968	1,420	93	116	324	2,000	950
29	202	.....	1,200	9,000	1,920	1,020	1,150	86	100	260	1,330	800
30	220	.....	1,180	8,090	2,000	994	994	79	86	220	1,150	700
31	240	.....	1,070	.....	2,090	.....	916	66	.....	202	.....	700
1910												
1	916	2,030	6,720	590	815	6,270	690	715	280	565	260	1,900
2	1,020	1,690	9,310	565	740	6,110	615	840	260	466	250	2,270
3	1,100	1,550	10,800	540	690	5,810	665	968	220	394	240	2,140
4	1,200	1,750	10,400	515	1,020	4,770	968	1,020	418	358	211	1,770
5	1,390	2,030	9,760	540	1,360	4,160	1,520	1,070	790	442	211	1,400
6	1,440	1,770	9,000	565	1,660	3,760	2,150	916	994	2,700	193	1,050
7	1,630	1,520	8,090	590	1,610	3,060	1,890	740	1,280	3,920	220	890
8	1,660	1,330	7,480	590	1,980	2,090	1,630	565	1,950	4,530	230	765
9	1,150	1,200	6,870	540	2,420	1,660	1,280	466	2,480	5,100	240	715
10	1,420	1,150	3,160	490	2,830	1,360	1,150	418	2,700	5,810	240	665
11	1,280	1,100	2,760	466	2,730	1,200	916	370	2,670	6,110	211	615
12	1,250	1,020	2,360	442	2,420	1,070	815	324	2,450	4,270	211	565
13	2,730	968	1,890	418	3,090	968	690	302	2,120	3,300	193	515
14	3,990	916	1,830	394	3,470	865	615	270	1,860	1,800	184	466
15	4,610	865	1,610	394	3,550	815	565	240	1,520	1,250	184	442
16	5,150	890	1,420	690	3,630	765	1,100	220	1,230	1,150	166	418
17	5,810	994	1,280	1,050	3,090	715	2,300	324	942	1,060	166	394
18	5,960	1,120	1,180	1,390	2,640	665	3,550	490	640	994	148	382
19	6,270	1,310	1,100	1,330	1,980	615	3,890	765	590	865	140	370
20	6,420	1,150	1,050	1,200	1,720	565	4,100	942	540	728	148	382
21	6,570	1,070	1,020	968	1,500	515	4,270	1,120	490	615	132	346
22	6,720	1,180	942	840	2,030	490	3,850	1,330	466	478	140	324
23	6,570	1,500	916	740	3,400	466	3,370	1,440	442	466	124	302
24	6,420	1,980	890	690	3,800	454	2,300	1,630	418	442	124	291
25	6,270	2,000	828	640	4,100	394	1,610	994	394	466	124	280
26	5,960	1,610	815	615	4,460	370	1,100	640	370	394	116	270
27	5,810	2,760	778	640	4,770	466	865	590	515	358	280	280
28	5,660	5,050	740	815	5,050	615	715	565	665	346	335	302
29	5,050	.....	690	994	5,520	1,230	590	540	815	324	528	370
30	3,330	.....	665	916	5,960	916	540	442	615	291	1,330	490
31	2,640	.....	615	.....	6,420	.....	615	370	.....	280	.....	890
1911												
1	1,250	3,630	3,780	1,100	4,210	442	132	35	72	3,630	1,720	2,030
2	1,630	3,470	2,960	994	4,950	442	116	30	72	4,460	1,550	1,750
3	2,060	3,330	2,180	968	5,660	394	100	30	59	4,690	1,390	1,580
4	2,450	3,030	1,790	1,150	6,110	382	93	30	66	10,200	1,280	1,500
5	2,830	2,760	1,520	1,950	6,270	324	86	25	59	13,600	1,150	1,420
6	2,640	2,420	1,430	3,200	5,960	313	100	25	47	14,300	1,180	1,360
7	2,210	2,330	1,440	3,580	4,210	280	93	35	47	14,500	1,690	1,250
8	1,890	2,580	2,700	3,800	3,300	260	86	47	86	13,900	1,920	1,200
9	1,770	2,610	3,650	3,990	2,000	240	79	41	184	13,000	1,750	1,150
10	1,630	2,450	3,990	4,100	1,520	220	72	37	260	11,900	1,580	1,150
11	1,520	1,990	4,330	4,050	1,310	211	66	59	418	11,100	1,470	1,520
12	1,390	1,720	4,690	3,940	1,200	100	59	86	466	10,400	1,610	2,210
13	1,200	1,480	4,860	3,800	1,120	100	100	72	540	9,760	2,990	2,210
14	994	1,420	4,770	3,850	968	184	86	59	515	8,850	3,630	1,750
15	1,230	1,440	3,990	4,270	942	202	79	47	280	8,390	3,850	1,440
16	2,330	1,540	2,980	4,860	865	193	66	59	2,180	7,630	3,800	1,420
17	3,200	1,860	2,120	5,050	765	166	53	72	2,540	6,270	3,990	2,030
18	3,630	2,340	1,770	5,380	752	157	47	86	2,960	5,150	3,850	2,760
19	3,800	2,670	1,560	5,810	690	148	47	72	3,710	3,470	3,760	2,640
20	3,630	3,030	1,520	5,890	652	140	41	59	3,850	2,420	3,990	2,120
21	2,800	3,420	1,220	5,960	615	124	35	47	3,890	1,800	4,270	2,480
22	2,240	3,760	1,050	6,040	590	116	35	41	3,800	1,950	4,390	3,370
23	1,770	3,970	1,180	6,110	1,750	124	30	35	3,510	3,090	4,610	3,630
24	1,660	3,760	1,080	6,040	1,920	116	30	35	3,130	3,440	4,460	3,550
25	1,550	3,330	1,020	5,150	1,500	108	25	30	2,930	3,760	4,050	2,930
26	1,420	3,280	1,030	3,940	942	124	25	30	2,670	3,850	3,470	2,270
27	1,280	3,130	1,120	2,640	740	515	25	30	2,760	3,630	3,090	2,210
28	1,280	3,760	1,950	1,890	640	302	35	35	2,900	3,260	2,450	2,210
29	2,030	.....	2,110	1,610	565	166	47	40	3,030	2,450	2,330	2,610
30	3,330	.....	1,630	2,210	490	148	41	47	3,300	2,180	2,210	2,240
31	3,550	.....	1,270	.....	478	.....	35	59	.....	1,950	.....	2,000

NOTE—Discharge estimated because of ice for December 8–10, 23–31, 1909. Discharge July 21–28, July 31–August 7, August 10, and August 23–29, 1911, estimated, because of observers inability to obtain gage height, from hydrograph of daily discharge at Vandalia and New Athens.

The daily and monthly discharges published here differ from those previously published in U. S. Geological Survey Water Supply Papers Nos. 245, 265, and 285, and in the report of the Internal Improvement Commission of Illinois on Surface Water 1908-10, because of revising rating curve on account of discharge measurements made in 1911.

MONTHLY DISCHARGE OF KASKASKIA RIVER AT CARLYLE, ILLINOIS, FOR 1908-11

[Drainage area, 2,680 square miles]

Month	Discharge in second-feet				Runoff—depth in inches on drainage area	Accuracy
	Maximum	Minimum	Mean	Per square mile		
1908						
March (2-31)	9,150	1,630	5,940	2.22	2.48	.....
April	6,870	1,630	3,940	1.47	1.64	.....
May	19,900	4,770	9,540	3.56	4.10	.....
June	3,850	590	1,220	.455	.51	.....
July	865	418	568	.212	.24	.....
August	394	86	195	.072	.08	.....
September	116	47	64.9	.024	.03	.....
October	47	47	47.0	.018	.02	.....
November	47	47	47.0	.018	.02	.....
December	86	47	59.6	.022	.02	.....
1909						
January	240	47	84.2	.031	.04	.....
February	6,420	280	2,500	.933	1.01	.....
March	7,940	1,070	3,280	1.22	1.41	.....
April	11,700	815	6,880	2.57	2.87	.....
May	6,870	1,070	3,400	1.27	1.46	.....
June	4,270	865	2,640	.985	1.10	.....
July	6,570	540	3,250	1.21	1.40	.....
August	1,500	66	337	.126	.14	.....
September	1,100	59	215	.080	.09	.....
October	916	23	247	.092	.11	.....
November	3,850	175	1,620	.605	.68	.....
December	4,390	600	1,680	.627	.72	.....
The year	11,700	23	2,170	.810	11.03	.....
1910						
January	6,720	916	3,790	1.41	1.63	.....
February	5,050	865	1,550	.578	.60	.....
March	10,800	615	3,450	1.29	1.49	.....
April	1,390	394	705	.263	.29	.....
May	6,420	690	2,920	1.09	1.26	.....
June	6,270	370	1,780	.664	.74	.....
July	4,270	540	1,640	.612	.71	.....
August	1,630	220	698	.260	.30	.....
September	2,700	220	1,040	.388	.43	.....
October	6,110	280	1,620	.604	.70	.....
November	1,330	116	241	.090	.10	.....
December	2,270	260	717	.267	.31	.....
The year	10,800	116	1,690	.631	8.56	.....
1911						
January	3,800	994	2,140	.799	.92	A.
February	3,970	1,420	2,730	1.02	1.06	A.
March	4,860	1,020	2,340	.873	1.01	A.
April	6,110	968	3,780	1.41	1.57	A.
May	6,270	478	2,050	.765	.88	A
June	515	100	225	.084	.09	A.
July	132	25	63.4	.024	.03	C.
August	86	30	46.3	.017	.02	D.
September	3,890	47	1,680	.627	.70	B.
October	14,500	1,800	6,740	2.52	2.90	B.
November	4,610	1,150	2,780	1.04	1.16	A.
December	3,630	1,150	2,060	.769	.89	A.
The year	14,500	25	2,220	.829	11.23	.....

KASKASKIA RIVER AT VANDALIA, ILLINOIS

Location.—At highway bridge at the east end of Main Street, Vandalia, Ill.

Records available.—February 26, 1908, to December 31, 1911.

Drainage area.—One thousand nine hundred and eighty square miles.

Gage.—Standard chain gage attached to bridge; datum has remained unchanged since establishment.

Channel.—Somewhat shifting; section is at a pool and the point of control is apparently permanent.

Discharge measurements.—Made from downstream side of bridge.

Floods.—The flood of May, 1908, reached a height of 21.2 feet on the gage.

Point of zero flow.—Not determined.

Winter flow.—Ice may affect the relation between gage heights and discharge during portions of December, January, and February.

Remarks.—The river is leveed along the left bank for some miles above and below the station. It is claimed that the levees, by confining the floods, cause unusual floods along the right bank, and law suits to recover damages have resulted. During extreme floods the levees sometime give way and so reduce the flood flow; this occurred during the floods of May, 1908, and October, 1911, flood water for several days passing around the gaging station. Former statements that all the flood water eventually passed the gaging station are in error.

DISCHARGE MEASUREMENTS OF KASKASKIA RIVER AT VANDALIA, ILLINOIS, IN 1908-11

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1908		*Feet*	*Square feet*	*Feet*	*Second-feet*
February 26	R. J. Taylor	155	2,350	18.53	6,870
March 19	R. J. Taylor	128	1,510	10.1	2,400
March 20	R. J. Taylor	128	1,430	9.6	2,130
April 30	R. J. Taylor	151	1,890	12.9	3,600
July 6	R. J. Taylor	112	713	3.6	287
August 6	R. J. Taylor	106	563	2.3	84
1909					
February 20	R. J. Taylor	156	2,440	15.78	5,330
March 16	W. M. O'Neill	132	1,150	7.26	1,340
March 24	W. M. O'Neill	121	908	5.33	702
May 13	H. J. Jackson	151	2,100	13.86	4,100
May 22	H. J. Jackson	123	1,030	6.41	1,030
November 22	H. J. Jackson	124	1,080	7.15	1,440
1910					
March 26	H. J. Jackson	119	762	4.78	533
May 29	H. J. Jackson	152	2,010	13.90	4,000
June 4	H. J. Jackson	126	1,130	8.05	1,570
December 21	P. S. Monk	110	475	3.40	*260
1911					
March 17	P. S. Monk	124	879	7.04	1,280
October 17	Monk and Brown	127	1,200	8.19	1,760

* Ice present.

DAILY GAGE HEIGHT, IN FEET, OF KASKASKIA RIVER AT VANDALIA, ILLINOIS, FOR 1908-11

[W. F. Radcliff, observer]

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1	.....	.....	18.2	8.2	11.7	7.4	4.0	2.4	2.0	1.5	1.3	1.8
2	.....	.....	18.0	12.0	11.0	7.5	3.8	2.3	1.9	1.5	1.3	1.7
3	.....	.....	17.8	13.2	10.6	7.0	3.9	2.2	1.7	1.6	1.3	1.7
4	.....	.....	17.6	12.2	13.9	6.6	3.8	2.0	1.6	1.6	1.3	1.6
5	.....	.....	17.2	10.5	17.1	6.6	3.6	1.9	1.5	1.6	1.3	1.6

DAILY GAGE HEIGHT, IN FEET, OF KASKASKIA RIVER AT VANDALIA, ILLINOIS, FOR 1908–11—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
6	.....	.....	17.4	10.4	21.2	6.8	3.6	2.0	1.5	1.5	1.3	1.6
7	.....	.....	17.8	10.3	20.5	6.6	3.5	2.1	1.5	1.5	1.3	1.6
8	.....	.....	17.4	12.4	20.8	6.4	3.6	2.2	1.4	1.4	1.2	1.7
9	.....	.....	18.0	15.0	19.9	5.6	4.4	1.8	1.4	.....	1.2	1.8
10	.....	.....	18.8	15.6	19.2	5.8	4.3	1.8	1.5	.....	1.2	1.8
11	.....	.....	18.9	14.2	18.5	6.3	4.0	1.7	1.5	.....	1.3	1.8
12	.....	.....	18.4	12.2	18.1	6.0	3.7	1.6	1.4	1.3	1.3	1.8
13	.....	.....	17.7	10.6	18.1	6.1	3.5	1.8	1.4	1.3	1.3	1.8
14	.....	.....	17.0	9.8	17.7	5.8	3.3	2.0	1.5	1.3	1.3	1.7
15	.....	.....	16.3	9.4	17.3	5.2	3.2	2.0	1.5	1.3	1.3	1.7
16	.....	.....	14.6	9.0	17.1	5.2	3.2	2.2	1.5	1.3	1.3	1.7
17	.....	.....	12.7	8.2	17.0	4.8	3.4	2.4	1.5	1.3	1.4	1.7
18	.....	.....	11.3	8.0	16.8	4.6	3.8	2.6	1.4	1.3	1.5	1.7
19	.....	.....	10.0	8.2	16.5	4.5	3.6	2.3	1.4	1.3	1.5	1.7
20	.....	.....	9.6	8.3	16.0	4.8	3.6	2.2	1.5	1.3	1.6	1.7
21	.....	.....	9.2	7.7	15.0	6.6	3.6	2.0	1.2	1.3	1.6	1.7
22	.....	.....	8.8	6.9	14.9	5.6	3.8	1.9	1.2	1.3	1.6	1.6
23	.....	.....	8.7	6.5	16.6	5.0	3.2	1.8	1.4	1.3	1.6	1.6
24	.....	.....	8.7	9.9	16.8	4.6	3.0	1.7	1.4	1.3	1.6	1.6
25	.....	.....	8.6	15.1	15.9	4.2	2.9	1.6	1.3	1.3	1.6	1.6
26	.....	18.4	8.2	16.2	14.4	4.1	2.8	1.6	1.3	1.3	1.7	1.6
27	.....	19.5	7.8	16.3	12.1	4.0	2.7	1.5	1.4	1.3	1.7	1.6
28	.....	19.8	7.6	16.2	10.6	3.7	2.7	1.5	1.4	1.3	1.8	1.6
29	.....	19.0	7.4	15.4	9.6	3.5	2.6	1.5	1.5	1.3	1.8	1.5
30	.....	.....	7.2	13.0	9.0	4.4	2.6	1.6	1.5	1.3	1.8	1.5
31	.....	.....	7.1	.....	8.4	.....	2.4	1.7	.....	1.3	.....	1.5
1909												
1	1.7	3.8	12.85	4.9	12.15	13.2	5.8	6.85	1.9	1.7	2.9	4.9
2	1.8	2.7	11.55	4.75	11.0	13.1	5.0	5.2	1.9	1.7	2.8	4.8
3	1.8	2.75	10.05	4.6	10.1	13.65	4.6	4.65	1.9	1.7	2.8	4.8
4	1.7	2.8	9.35	4.5	9.65	14.1	4.3	4.3	1.9	1.7	2.7	4.7
5	1.7	2.6	9.0	4.4	9.3	14.8	4.1	4.05	1.9	1.7	2.7	4.65
6	1.7	6.35	8.5	10.35	9.0	14.9	6.2	3.85	1.9	1.6	2.65	4.4
7	1.7	8.4	7.9	17.7	8.45	12.65	10.6	3.65	1.9	1.6	2.6	4.3
8	1.7	5.85	7.55	20.3	8.1	11.05	14.0	3.45	1.9	1.6	4.5	4.2
9	1.7	5.6	14.05	18.8	11.35	9.8	15.6	3.35	2.65	1.6	3.85	4.15
10	1.6	8.9	16.75	17.4	14.85	9.5	16.4	3.15	4.0	1.55	3.6	4.1
11	1.6	8.55	17.1	16.5	16.55	11.35	17.0	3.0	2.8	1.5	3.35	4.4
12	1.6	6.1	13.55	15.5	15.25	10.0	17.6	2.9	2.5	1.5	4.9	5.7
13	1.6	4.8	9.75	18.3	13.75	12.85	17.9	2.85	2.3	1.5	9.7	10.3
14	1.6	6.6	8.35	20.9	13.7	14.5	18.4	2.75	2.15	1.5	8.1	11.6
15	1.6	13.35	7.75	19.7	12.35	11.7	18.2	2.7	2.0	1.6	5.4	9.9
16	1.6	12.75	7.3	18.6	10.8	9.05	17.0	2.6	1.9	1.7	6.5	9.05
17	1.7	7.95	6.9	18.25	9.65	12.75	15.7	2.6	1.9	1.7	11.55	8.8
18	1.7	7.6	6.5	17.85	8.65	15.15	13.85	2.5	1.8	1.7	9.25	8.65
19	1.85	11.3	6.2	17.5	7.95	12.8	12.75	2.5	1.8	2.6	7.6	8.4
20	2.35	15.55	6.0	17.4	7.35	7.7	12.4	2.4	2.3	4.1	6.7	7.9
21	2.95	16.8	5.9	17.75	6.8	6.75	12.2	2.3	3.35	3.75	6.15	.....
22	3.0	16.9	5.75	18.35	6.45	6.2	11.25	2.2	3.85	3.6	7.8	.....
23	3.0	16.75	5.45	18.45	6.05	5.7	9.9	2.2	4.2	3.8	10.65	.....
24	2.8	16.95	5.35	18.0	5.9	5.6	8.65	2.15	3.3	4.25	11.15	.....
25	2.65	17.2	6.6	17.6	6.15	5.25	8.1	2.1	2.65	4.05	9.9	5.5
26	2.55	16.85	7.25	17.25	8.6	5.4	6.8	2.1	2.15	2.95	7.9	.....
27	2.5	15.9	6.6	16.8	8.75	5.85	6.5	2.0	2.05	3.15	6.85	.....
28	2.45	14.3	5.75	16.55	8.9	5.6	5.9	2.0	1.9	3.0	6.0	.....
29	3.8	.....	5.5	16.2	9.1	5.3	5.6	1.9	1.8	3.0	5.5	.....
30	4.75	.....	5.3	14.25	9.6	5.6	5.85	1.9	1.7	2.9	5.15	.....
31	.....	.....	5.15	.....	11.9	.....	7.2	1.9	.....	2.9	.....	5.4
1910												
1	.....	6.95	19.7	4.3	4.8	10.75	4.2	5.8	2.6	3.35	2.45	10.65
2	.....	6.85	19.3	4.25	5.25	9.1	5.55	6.35	2.85	3.35	2.4	9.1
3	.....	7.5	18.25	4.2	7.0	8.25	7.5	5.95	3.95	3.35	2.3	8.75
4	.....	7.35	17.35	4.1	11.1	8.15	8.65	5.0	4.6	3.1	2.15	8.65
5	.....	6.15	16.3	4.1	8.05	9.65	7.9	4.55	4.9	6.45	2.15	8.35
6	.....	6.3	14.95	4.0	7.05	8.7	7.35	4.3	4.95	13.7	2.15	7.85
7	.....	6.2	13.35	4.0	7.35	7.15	7.05	3.95	7.0	13.6	2.15	7.55
8	6.3	6.2	11.75	3.9	10.9	6.5	6.6	3.8	8.45	10.6	2.05	7.05
9	.....	6.1	10.05	3.9	11.45	6.1	5.4	3.4	9.6	8.9	2.05	6.7
10	.....	5.8	9.15	3.8	10.05	5.85	4.45	3.05	10.5	8.05	2.05	6.2
11	6.85	5.35	8.4	3.8	9.5	5.8	3.95	3.3	9.4	6.2	2.05	5.5
12	8.35	4.95	8.0	3.8	13.8	5.5	4.95	3.65	8.65	5.65	2.05	4.35
13	10.5	4.9	7.35	3.7	15.25	5.15	4.45	3.0	7.2	5.15	2.05	4.0
14	12.65	4.9	7.0	3.7	13.05	5.0	4.6	4.3	6.45	4.8	2.05	3.65
15	15.0	4.9	6.6	3.7	10.8	4.95	4.1	4.8	6.0	4.4	2.05	3.25
16	14.25	4.8	6.25	4.0	9.35	4.85	13.0	5.15	5.35	4.25	2.05	3.2
17	13.0	4.8	6.05	5.9	8.8	4.65	16.4	5.15	4.55	4.05	2.05	3.1
18	13.45	4.8	5.85	7.0	8.15	4.4	16.9	5.25	4.15	3.85	2.05	3.05

DAILY GAGE HEIGHT, IN FEET, OF KASKASKIA RIVER AT VANDALIA, ILLINOIS, FOR 1908-11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1910												
19	17.1	4.8	5.65	7.05	7.55	4.1	13.75	7.15	3.95	3.75	2.05	3.1
20	17.5	4.8	5.45	6.25	7.05	4.2	9.35	7.8	3.6	3.7	2.05	3.0
21	16.65	5.75	5.35	5.45	7.15	4.3	7.6	5.6	3.15	3.5	2.05	3.1
22	16.3	5.55	5.25	4.8	12.8	4.4	6.75	8.2	2.85	3.4	2.05	3.1
23	16.2	5.35	5.1	4.6	15.05	4.5	5.85	6.0	3.3	3.25	2.0	3.1
24	14.55	5.25	5.0	4.5	16.95	4.6	5.2	4.2	3.5	3.15	2.1	2.9
25	13.45	5.15	4.95	4.45	18.55	3.4	4.85	4.3	4.15	3.15	2.0	2.9
26	11.5	5.5	4.8	6.5	18.3	3.95	4.35	4.55	4.25	3.15	2.1	2.8
27	9.9	15.8	4.7	5.75	17.25	6.0	4.15	4.25	4.5	3.15	2.0	2.95
28	8.8	18.2	4.6	5.2	16.05	4.75	3.95	3.7	4.2	3.05	4.45	3.4
29	8.1	.....	4.55	4.95	14.15	4.05	3.5	3.3	4.0	2.85	12.15	5.0
30	7.75	.....	4.5	4.85	14.8	5.0	3.15	3.2	3.5	2.75	11.7	6.45
31	7.3	.....	4.4	.....	13.8	.....	4.5	3.0	.....	2.65	.....	6.85
1911												
1	8.7	11.6	9.35	5.2	16.3	5.4	2.15	1.15	1.15	17.6	8.35	7.3
2	9.6	10.95	8.45	4.95	16.5	4.75	2.1	1.15	1.2	19.75	7.4	7.05
3	10.35	10.65	7.9	7.35	14.85	3.85	2.85	1.2	1.15	20.4	6.6	6.95
4	8.95	10.2	7.6	11.0	9.3	3.0	2.8	1.15	1.15	20.0	6.0	6.75
5	8.8	9.3	8.15	13.05	7.95	2.85	2.75	1.15	2.25	19.75	6.1	6.65
6	8.5	8.95	9.75	14.8	6.7	2.8	2.75	1.15	3.1	18.75	7.2	6.4
7	7.9	8.6	12.15	14.75	6.6	2.65	2.65	1.7	4.1	18.5	8.8	6.15
8	7.7	8.55	14.95	14.15	5.1	2.5	2.5	2.2	4.5	18.25	8.15	5.9
9	7.2	8.4	16.2	13.55	4.7	2.5	2.4	2.05	4.85	17.7	7.6	5.9
10	6.6	8.3	14.65	13.3	4.1	2.45	2.25	1.5	5.2	16.45	6.75	6.1
11	6.15	8.1	12.0	12.95	3.85	2.45	2.7	1.3	5.05	15.35	6.35	7.4
12	5.6	7.65	10.45	12.65	3.75	2.35	3.6	1.15	5.65	13.9	5.85	8.7
13	5.35	7.15	9.55	11.25	3.65	2.75	2.25	1.2	8.55	11.75	5.7	9.5
14	10.9	6.9	8.75	11.05	3.6	2.3	1.4	1.15	11.05	9.45	5.4	9.35
15	14.1	6.6	8.55	14.75	3.45	2.15	1.35	1.15	11.9	8.5	5.5	8.4
16	14.9	7.35	7.55	16.05	3.35	2.15	1.35	1.15	13.3	7.95	9.75	8.85
17	12.95	8.7	7.15	16.1	3.3	1.95	1.35	1.15	15.55	7.75	12.2	9.55
18	11.95	9.2	6.75	15.4	3.15	1.7	1.3	1.1	14.0	7.75	14.3	9.5
19	10.5	11.15	6.8	14.95	2.75	1.55	1.3	1.05	10.6	7.55	13.3	8.25
20	9.6	12.25	6.25	14.4	3.0	1.35	1.25	.85	9.35	7.3	11.3	10.2
21	8.65	12.8	6.0	11.4	6.75	1.35	1.25	.85	8.55	6.9	10.2	12.8
22	7.6	11.0	5.8	10.25	10.05	1.35	1.25	.75	7.35	10.1	9.7	12.15
23	7.85	9.95	5.55	9.05	9.6	1.35	1.15	.8	6.65	14.15	9.8	9.75
24	7.1	9.8	5.3	8.6	9.25	1.3	1.2	1.25	6.1	13.55	9.8	9.0
25	6.7	10.2	5.0	8.25	8.7	1.25	1.15	1.7	5.55	11.65	9.6	8.75
26	6.5	11.9	5.5	7.85	8.5	1.2	1.15	1.7	12.3	11.15	9.05	8.25
27	9.55	12.05	6.1	7.4	8.2	1.15	1.15	1.4	15.2	9.75	8.8	8.1
28	12.15	10.4	6.95	7.25	7.4	2.55	1.15	1.3	15.7	9.2	8.5	7.85
29	14.0	.....	6.8	7.2	6.9	2.8	1.2	1.15	16.35	8.7	8.3	7.75
30	13.35	.....	5.65	13.1	6.5	2.25	1.15	1.15	16.8	8.5	7.8	7.65
31	12.45	.....	5.45	.....	6.05	.....	1.15	1.15	.....	8.35	.....	8.2

NOTE—Ice conditions existed December 8-31, 1909, January 1-22, and a few days during the middle of February, 1910. The levee along the left bank broke during the flood of May, 1908, and on the morning of October 3, 1911, letting considerable water flow around the section; consequently, gage heights for the May, 1908 flood, and from October 3, to about October 10, 1911, do not represent the true flow. The maximum stage of the October, 1911, flood was found to be 23.0 feet by leveling on the high water mark, and occured on the morning of October 3. The maximum stage for the May, 1908, flood was not determined.

RATING TABLE FOR KASKASKIA RIVER AT VANDALIA, ILLINOIS, FROM FEBRUARY 26, 1908-DECEMBER 31, 1911

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.00	7	2.10	68	3.20	216	4.30	455
1.10	9	2.20	78	3.30	236	4.40	479
1.20	12	2.30	88	3.40	256	4.50	503
1.30	15	2.40	99	3.50	276	4.60	527
1.40	19	2.50	110	3.60	296	4.70	551
1.50	24	2.60	122	3.70	318	4.80	575
1.60	29	2.70	135	3.80	340	4.90	600
1.70	35	2.80	149	3.90	362	5.00	625
1.80	42	2.90	164	4.00	385	5.10	651
1.90	50	3.00	180	4.10	408	5.20	678
2.00	59	3.10	198	4.20	431	5.30	705

RATING TABLE FOR KASKASKIA RIVER AT VANDALIA, ILLINOIS, FROM FEBRUARY 26, 1908–DECEMBER 31, 1911—*Concluded*

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
5.40	732	8.30	1,674	11.20	2,868	14.10	4,198
5.50	760	8.40	1,712	11.30	2,912	14.20	4,246
5.60	788	8.50	1,750	11.40	2,956	14.30	4,294
5.70	816	8.60	1,790	11.50	3,000	14.40	4,342
5.80	844	8.70	1,830	11.60	3,046	14.50	4,390
5.90	872	8.80	1,870	11.70	3,092	14.60	4,438
6.00	900	8.90	1,910	11.80	3,138	14.70	4,486
6.10	928	9.00	1,950	11.90	3,184	14.80	4,534
6.20	956	9.10	1,990	12.00	3,230	14.90	4,582
6.30	984	9.20	2,030	12.10	3,276	15.00	4,630
6.40	1,014	9.30	2,070	12.20	3,322	15.10	4,678
6.50	1,044	9.40	2,110	12.30	3,368	15.20	4,726
6.60	1,074	9.50	2,150	12.40	3,414	15.30	4,774
6.70	1,104	9.60	2,190	12.50	3,460	15.40	4,822
6.80	1,136	9.70	2,230	12.60	3,506	15.50	4,870
6.90	1,168	9.80	2,270	12.70	3,552	15.60	4,920
7.00	1,200	9.90	2,310	12.80	3,598	15.70	4,970
7.10	1,234	10.00	2,350	12.90	3,644	15.80	5,020
7.20	1,268	10.10	2,392	13.00	3,690	15.90	5,070
7.30	1,302	10.20	2,434	13.10	3,736	16.00	5,120
7.40	1,338	10.30	2,476	13.20	3,782	17.00	5,620
7.50	1,374	10.40	2,518	13.30	3,828	18.00	6,120
7.60	1,410	10.50	2,560	13.40	3,874	19.00	6,620
7.70	1,446	10.60	2,604	13.50	3,920	20.00	7,120
7.80	1,484	10.70	2,648	13.60	3,966	21.00	7,620
7.90	1,522	10.80	2,692	13.70	4,012	22.00	8,120
8.00	1,560	10.90	2,736	13.80	4,058		
8.10	1,598	11.00	2,780	13.90	4,104		
8.20	1,636	11.10	2,824	14.00	4,150		

NOTE—The above table is not applicable for ice or obstructed channel conditions. It is based on twenty discharge measurements made during 1908, 1909, and 1910, 1911, and is well defined between gage heights 2.2 feet and 14.0 feet. Above gage height 15.5 feet the rating curve is a tangent, the difference being 50 per tenth.

DAILY DISCHARGE, IN SECOND-FEET, OF KASKASKIA RIVER AT VANDALIA, ILLINOIS, FOR 1908-11

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1	.....	.....	6,220	1,640	3,090	1,340	385	99	59	24	15	42
2	.....	.....	6,120	3,230	2,780	1,370	340	88	50	24	15	35
3	.....	.....	6,020	3,780	2,600	1,200	362	78	35	29	15	35
4	.....	.....	5,920	3,320	4,100	1,070	340	59	29	29	15	29
5	.....	.....	5,720	2,360	5,670	1,070	296	50	24	29	15	29
6	.....	.....	5,820	2,320	7,720	1,140	296	59	24	24	15	29
7	.....	.....	6,020	2,480	7,370	1,070	276	68	24	24	15	29
8	.....	.....	5,820	3,410	7,520	1,010	296	78	19	19	12	35
9	.....	.....	6,120	4,630	7,070	788	479	42	19	18	12	42
10	.....	.....	6,520	4,920	6,720	844	455	42	24	17	12	42
11	.....	.....	6,570	4,250	6,370	984	385	35	24	16	15	42
12	.....	.....	6,320	3,320	6,170	900	318	29	19	15	15	42
13	.....	.....	5,970	2,600	6,170	928	276	42	19	15	15	42
14	.....	.....	5,620	2,270	5,970	844	236	59	24	15	15	35
15	.....	.....	5,270	2,110	5,770	678	216	59	24	15	15	35
16	.....	.....	4,440	1,950	5,670	678	216	78	24	15	15	35
17	.....	.....	3,550	1,640	5,620	575	256	99	24	15	19	35
18	.....	.....	2,910	1,560	5,520	527	340	122	19	15	24	35
19	.....	.....	2,350	1,640	5,370	503	296	88	19	15	24	35
20	.....	.....	2,190	1,670	5,120	575	296	78	24	15	29	35
21	.....	.....	2,030	1,450	4,630	1,070	296	59	12	15	29	35
22	.....	.....	1,870	1,170	4,580	788	340	50	12	15	29	29
23	.....	.....	1,830	1,040	5,420	625	216	42	19	15	29	29
24	.....	.....	1,830	2,310	5,520	527	180	35	19	15	29	29
25	.....	.....	1,790	4,680	5,070	431	164	29	15	15	29	29
26	.....	6,320	1,640	5,220	4,340	408	149	29	15	15	35	29
27	.....	6,870	1,480	5,270	3,280	385	135	24	19	15	35	29
28	.....	7,020	1,410	5,220	2,600	318	135	24	19	15	42	24
29	.....	6,620	1,340	4,820	2,190	276	122	24	24	15	42	24
30	.....	.....	1,270	3,690	1,950	479	122	29	24	15	42	24
31	.....	.....	1,230	.....	1,710	.....	99	35	.....	15	.....	24

DAILY DISCHARGE, IN SECOND-FEET, OF KASKASKIA RIVER AT VANDALIA, ILLINOIS, FOR 1908–11—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
1	35	340	3,620	600	3,300	3,780	844	1,150	50	35	164	600
2	42	135	3,020	563	2,780	3,740	625	678	50	35	149	575
3	42	142	2,370	527	2,390	3,990	527	539	50	35	149	575
4	35	149	2,090	503	2,210	4,200	455	455	50	35	135	551
5	35	122	1,950	479	2,070	4,530	408	396	50	35	135	539
6	35	999	1,750	2,500	1,950	4,580	956	351	50	29	128	479
7	35	1,710	1,520	5,970	1,730	3,530	2,600	307	50	29	122	455
8	35	858	1,390	7,270	1,600	2,800	4,150	266	50	29	503	400
9	35	788	4,170	6,520	2,930	2,270	4,920	246	128	29	351	380
10	29	1,910	5,500	5,820	4,560	2,150	5,320	207	388	26	296	360
11	29	1,770	5,670	5,370	5,400	2,930	5,620	180	149	24	246	479
12	29	928	3,940	4,870	4,750	2,350	5,920	164	110	24	600	816
13	29	575	2,250	6,270	4,040	3,620	6,070	156	88	24	2,230	2,480
14	29	1,070	1,690	7,570	4,010	4,390	6,320	142	73	24	1,600	3,050
15	29	3,850	1,460	6,970	3,390	3,090	6,220	135	59	29	732	2,310
16	29	3,580	1,300	6,420	2,690	1,970	5,620	122	50	35	1,040	1,970
17	35	1,540	1,170	6,240	2,210	3,580	4,970	122	50	35	3,020	1,870
18	35	1,410	1,040	6,040	1,810	4,700	4,080	110	42	35	2,050	1,810
19	46	2,910	956	5,870	1,540	3,600	3,580	110	42	122	1,410	1,710
20	94	4,900	900	5,820	1,320	1,450	3,410	99	88	408	1,100	1,520
21	172	5,520	872	6,000	1,140	1,120	3,320	88	246	329	942	1,200
22	180	5,570	830	6,300	1,030	956	2,890	78	351	296	1,480	1,200
23	180	5,500	746	6,340	914	816	2,310	78	431	340	2,630	1,000
24	149	5,600	718	6,120	872	788	1,810	73	236	443	2,850	800
25	128	5,720	1,070	5,920	942	692	1,600	68	128	396	2,310	500
26	116	5,540	1,280	5,740	1,790	732	1,140	68	73	172	1,520	500
27	110	5,070	1,070	5,520	1,850	858	1,040	59	64	207	1,150	500
28	104	4,290	830	5,400	1,910	788	872	59	50	180	900	400
29	340	.....	760	5,220	1,990	705	788	50	42	180	760	400
30	563	.....	705	4,270	2,190	788	858	50	35	164	664	400
31	452	.....	664	.....	3,180	.....	1,270	50	.....	164	.....	400
1910												
1	400	1,180	6,970	455	575	2,670	431	844	122	246	104	2,630
2	500	1,150	6,770	443	692	1,990	774	999	156	246	99	1,990
3	600	1,370	6,240	431	1,200	1,660	1,370	886	374	246	88	1,850
4	700	1,320	5,800	408	2,820	1,620	1,810	625	527	198	73	1,810
5	800	942	5,270	408	1,580	2,210	1,520	515	600	1,030	73	1,690
6	900	984	4,610	385	1,220	1,830	1,320	455	612	4,010	73	1,500
7	940	956	3,850	385	1,320	1,250	1,220	374	1,200	3,970	73	1,390
8	984	965	3,120	362	2,740	1,040	1,070	340	1,730	2,600	64	1,220
9	1,040	928	2,370	362	2,980	928	732	256	2,190	1,910	64	1,100
10	1,090	844	2,010	340	2,800	858	491	189	2,560	1,580	64	956
11	1,150	718	1,710	340	2,150	844	374	236	2,110	956	64	760
12	1,690	612	1,560	340	4,060	760	612	307	1,810	802	64	467
13	2,560	600	1,320	318	4,750	664	491	180	1,270	664	64	385
14	3,530	600	1,200	318	3,710	625	527	455	1,030	575	64	307
15	4,630	600	1,070	318	2,690	612	408	575	900	479	64	226
16	4,270	575	970	385	2,090	588	3,090	664	718	443	64	216
17	3,690	575	914	872	1,870	539	5,320	664	515	396	64	198
18	3,900	575	858	1,200	1,620	479	5,570	692	420	351	64	189
19	5,670	575	802	1,220	1,390	408	4,040	1,250	374	329	64	198
20	5,870	575	746	970	1,220	431	2,090	1,480	296	318	64	180
21	5,440	830	718	746	1,250	455	1,410	788	207	276	64	198
22	5,270	774	692	575	3,600	479	1,120	1,640	156	256	64	198
23	5,220	718	651	527	4,650	503	858	900	236	226	59	198
24	4,410	692	625	503	5,600	527	678	431	276	207	68	164
25	3,900	664	612	491	6,400	256	580	455	420	207	59	164
26	3,000	760	575	1,040	6,270	374	467	515	443	207	68	149
27	2,310	5,020	551	830	5,740	900	420	443	503	207	59	172
28	1,870	6,220	527	678	5,140	563	374	318	431	189	491	256
29	1,600	.....	515	612	4,220	396	276	236	385	156	3,300	625
30	1,460	.....	503	588	4,530	625	207	216	276	142	3,090	1,030
31	1,300	.....	479	.....	4,060	.....	503	180	.....	128	.....	1,150
1911												
1	1,830	3,050	2,090	678	5,270	732	73	10	10	5,920	1,710	1,300
2	2,190	2,760	1,730	612	5,370	563	68	10	12	9,000	1,340	1,200
3	2,000	2,630	1,520	1,320	4,560	351	156	12	10	12,000	1,070	1,200
4	1,900	2,430	1,410	2,780	2,070	180	149	10	10	13,000	900	1,140
5	1,870	2,070	1,620	3,710	1,540	156	142	10	83	13,000	928	1,070
6	1,750	1,930	2,250	4,530	1,100	149	142	10	198	12,000	1,270	1,010
7	1,520	1,790	3,300	4,510	1,070	128	128	35	408	10,000	1,870	956
8	1,450	1,770	4,610	4,220	651	110	110	78	503	8,000	1,640	872
9	1,270	1,710	5,220	3,940	551	110	99	64	588	7,000	1,410	872
10	1,070	1,670	4,460	3,830	408	104	83	24	678	5,320	1,140	928
11	942	1,600	3,230	3,670	351	104	135	15	638	4,820	1,010	1,340
12	788	1,430	2,540	3,390	329	94	296	10	802	4,100	844	1,830
13	718	1,250	2,170	2,890	307	142	83	12	1,770	3,140	816	2,150

DAILY DISCHARGE, IN SECOND-FEET, OF KASKASKIA RIVER AT VANDALIA, ILLINOIS, FOR 1908–11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1911												
14	2,740	1,170	1,850	2,800	296	88	19	10	2,800	2,110	732	2,110
15	4,200	1,070	1,770	4,510	266	73	17	10	3,180	1,750	760	1,710
16	4,580	1,320	1,390	5,140	246	73	17	10	3,830	1,560	2,270	1,870
17	3,670	1,830	1,250	5,170	236	54	17	10	4,900	1,480	3,320	2,150
18	3,210	2,030	1,120	4,820	207	35	15	9	4,150	1,480	4,290	2,150
19	2,560	2,850	1,140	4,610	142	26	15	8	2,600	1,410	3,830	1,640
20	2,190	3,340	970	4,340	180	17	14	4.5	2,090	1,300	2,910	2,430
21	1,810	3,600	900	2,960	1,120	17	14	4.5	1,770	1,170	2,430	3,600
22	1,410	2,780	844	2,460	2,370	17	14	3.5	1,320	2,390	2,230	3,320
23	1,500	2,330	774	1,970	2,190	17	10	4	1,090	4,250	2,270	2,270
24	1,230	2,270	705	1,790	2,050	15	12	14	928	3,970	2,270	1,950
25	1,100	2,430	625	1,660	1,830	14	10	35	774	3,050	2,190	1,870
26	1,040	3,180	760	1,500	1,750	12	10	35	3,370	2,870	1,950	1,640
27	2,170	3,250	928	1,340	1,640	10	10	19	4,730	2,270	1,870	1,600
28	3,300	2,520	1,180	1,280	1,340	116	10	15	4,970	2,030	1,750	1,480
29	4,150	.....	1,140	1,270	1,170	149	12	10	5,300	1,830	1,670	1,480
30	3,850	.....	802	3,740	1,040	83	10	10	5,520	1,750	1,480	1,410
31	3,440	.....	746	.....	914	.....	10	10	.....	1,710	.....	1,640

NOTE—Discharge estimated because of ice for December 8–10, 21–31, 1909, January 1–10, 1910, and January 3–4, 1911. During May, 1908, considerable water passed around the section, due to breaks in the levee. Discharge October 2–9, 1911, estimated by comparison with discharge at Carlyle because of break in levee on east bank allowing portion of flow to pass around the section. No estimate is given of the amount of water that passed around the section during the 1908 flood.

MONTHLY DISCHARGE OF KASKASKIA RIVER AT VANDALIA, ILLINOIS, FOR 1908–11

[Drainage area, 1,980 square miles]

Month	Discharge in second-feet				Runoff—depth in inches on drainage area	Accuracy
	Maximum	Minimum	Mean	Per square mile		
1908						
March	6,570	1,230	3,970	2.01	2.32	B.
April	5,270	1,040	3,010	1.52	1.79	B.
May*	7,720	1,710	4,960	2.51	2.89	B.
June	1,340	276	780	.394	.44	A.
July	479	99	268	.135	.16	A.
August	122	24	55.1	.028	.03	B.
September	59	12	23.5	.012	.01	C.
October	29	15	17.8	.009	.01	C.
November	42	15	22.3	.011	.01	C.
December	42	24	33.0	.017	.02	B.
1909						
January	563	29	104	.052	.06	B.
February	5,720	122	2,590	1.31	1.36	A.
March	5,670	664	1,850	.934	1.08	A.
April	7,570	479	4,970	2.51	2.80	B.
May	5,400	872	2,400	1.21	1.40	A.
June	4,700	692	2,520	1.27	1.42	A.
July	6,320	408	2,920	1.47	1.70	A.
August	1,150	50	215	.109	.13	B.
September	431	35	111	.056	.06	B.
October	443	24	127	.064	.07	B.
November	3,020	122	1,050	.530	.60	A.
December	3,050	.....	975	.492	.57	C.
The year	7,570	.....	1,650	.834	11.25	
1910						
January	5,870	.....	2,600	1.31	1.51	C.
February	6,220	575	1,150	.581	.60	A.
March	6,970	479	2,080	1.05	1.21	B.
April	1,220	318	562	.284	.32	A.
May	6,400	575	3,060	1.55	1.79	A.
June	2,670	256	903	.456	.51	A.
July	5,570	207	1,320	.667	.77	A.
August	1,640	180	584	.295	.34	A.

MONTHLY DISCHARGE OF KASKASKIA RIVER AT VANDALIA, ILLINOIS, FOR 1908-11—*Concluded*

Month	Discharge in second-feet				Runoff—depth in inches on drainage area	Accuracy
	Maximum	Minimum	Mean	Per square mile		
1910						
September	2,560	122	762	.385	.43	A.
October	4,010	128	760	.384	.44	A.
November	3,300	59	291	.147	.16	B.
December	2,630	.....	760	.384	.44	C.
The year	6,970	59	1,240	.626	8.52	
1911						
January*	4,580	718	2,180	1.10	1.27	B.
February	3,600	1,070	2,220	1.12	1.17	A.
March	5,220	625	1,780	.899	1.04	A.
April	5,170	612	3,050	1.54	1.72	A.
May	5,870	142	1,370	.692	.80	A.
June	732	10	125	.063	.07	B.
July	296	10	61.3	.031	.04	C.
August	78	3.5	16.8	.008	.01	D.
September	5,520	10	1,970	.995	1.11	B.
October*	†13,000	1,170	4,700	2.37	2.73	C.
November	4,290	732	1,810	.914	1.02	B.
December	3,600	872	1,680	.849	.98	B.
The year	†13,000	3.5	1,740	.879	11.96	

* See footnotes to table of daily discharge.
† October maximum discharge estimated.

KASKASKIA RIVER AT NEW ATHENS, ILLINOIS

Location.—At the Illinois Central Railroad bridge about 600 feet north of the railroad station at New Athens, Ill., about 1 mile below the mouth of Silver Creek and 3 miles above the mouth of Lively Creek.

Records available.—January 23, 1907, to December 31, 1911. A record of river heights from January 23, 1907, to October 28, 1909, was kept by Mr. C. J. Von Roth Roffy, the present observer, for the New Athens Journal. The river height was taken on Wednesday and Thursday mornings of each week, the river height for Wednesday being published Friday with the change in twenty-four hours as obtained from the river height of Wednesday. This record was kept for the information of farmers living on the west side of the river who were cut off from reaching town when the river reached a height of 30 feet. The record is authentic. The gage heights have been reduced to the present datum, the maximum error probably not being over 0.4 foot, decreasing as the stage increases.

Drainage area.—Five thousand two hundred and twenty square miles.

Gage.—Standard chain gage attached to the bridge; datum has remained unchanged since establishment.

Channel.—Permanent; broken by one bridge pier at ordinary stages and three at high stages. Measurements to date indicate that point of control is permanent.

Discharge measurements.—Made from downstream lower chord of bridge and from wooden trestle approaches.

Floods.—The flood of the fall of 1898 reached a height of 34.5 feet by the present datum.

Winter flow.—The relation between gage height and discharge may be slightly affected by ice during portions of December, January, and February.

DISCHARGE MEASUREMENTS OF KASKASKIA RIVER AT NEW ATHENS, ILLINOIS, IN 1909–11

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1909		*Feet*	*Sq. ft.*	*Feet*	*Sec.-ft.*
November 2	H. J. Jackson	174	610	4.13	401
November 16	H. J. Jackson	239	3,310	16.59	7,020
November 20	H. J. Jackson	250	3,660	18.02	7,850
November 30	H. J. Jackson	218	1,820	9.80	2,470
December 1	H. J. Jackson	213	1,490	8.54	1,920
December 3	H. J. Jackson	208	1,240	7.40	1,500
1910					
March 23	H. J. Jackson	205	1,220	7.48	1,400
May 21	C. T. Bailey	216	1,780	9.96	2,820
May 21	C. T. Bailey	202	2,080	9.72	*2,440
May 22	C. T. Bailey	213	1,580	9.18	2,260
May 26	C. T. Bailey	271	4,250	20.55	11,700
May 30	C. T. Bailey	271	4,420	21.06	11,800
May 31	C. T. Bailey	261	4,210	20.28	10,300
June 1	C. T. Bailey	260	4,090	19.77	9,570
June 5	C. T. Bailey	248	3,520	17.63	7,930
June 7	C. T. Bailey	251	3,700	18.32	8,650
December 10	Bailey and Monk	195	945	5.96	902
1911					
March 13	P. S. Monk	259	3,840	18.48	8,630
October 23	Monk and Brown	241	2,990	15.18	5,080
November 4	P. S. Monk	215	1,470	8.65	1,930

* Not at regular gaging section.

DAILY GAGE HEIGHT IN FEET, OF KASKASKIA RIVER AT NEW ATHENS, ILLINOIS, FOR 1907–11

[C. J. Von Roth Rossy, observer]

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1907												
1					15.5			13.6				
2					17.5					4.0		
3				9.7						4.0		
4				9.1					6.6			4.6
5						19.1			6.4			4.4
6		18.0	11.7			19.7					6.8	
7		17.7	10.1					7.4			6.4	
8					11.1			8.7				
9					12.1					9.8		
10				8.1			7.6			5.7		
11				7.9			6.6		5.6			5.1
12						21.5			5.4			5.3
13		6.3	15.5			22.4					4.4	
14		5.7	19.6					17.0			4.3	
15					14.1			16.0				
16					17.5					4.4		
17				7.5			7.6			4.2		
18				7.1			7.9					6.6
19		7.9	22.2			22.8						7.7
20		7.6	21.3			21.2					5.8	
21								12.7			4.9	
22					14.1			15.6				
23	24.4				15.1					3.9		
24	24.3			10.3			13.6			3.8		
25				11.6			15.6		4.4			15.2
26						10.1			4.4			16.7
27		2.1	17.9			11.1					5.4	
28		9.1	17.6					13.5			5.2	
29					10.2			10.8				
30	24.4				8.9					4.3		
31	19.0						15.6			4.4		

DAILY GAGE HEIGHT, IN FEET, OF KASKASKIA RIVER AT NEW ATHENS, ILLINOIS, FOR 1907–11—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1	16.2			14.1			14.8			3.5		
2	13.6			14.1			14.1		3.8			5.4
3									3.8			4.9
4			24.3								3.3	
5		10.5	24.2					5.4			3.3	
6		16.5			24.5			5.4				
7					27.3							
8	12.6			16.5			14.4					
9	10.8			18.8			13.5		3.8			3.9
10						14.7			3.7			3.8
11						15.1					3.3	
12		20.0						5.6			3.3	
13		19.6			33.2			6.3				
14					32.2					3.5		
15	17.1			20.1			10.3			3.5		
16	18.0			19.3			9.4		3.6			3.6
17						17.5			3.6			3.5
18			22.6			17.3					3.3	
19		23.9	22.2					4.7			3.3	
20		24.7			24.5			4.6				
21					23.8					3.3		
22	10.9			12.8			8.7			3.3		
23	10.5			11.8			8.8					3.4
24						17.5						3.5
25			17.1			17.2						
26		24.4	14.1					4.1				
27		24.3			23.9			4.0				
28					23.4					3.3		
29	8.0			21.1			12.1		3.5	3.3		
30	7.6			23.1			10.8					
31												
1909												
1				9.1			11.5		3.4		4.35	8.6
2									3.3		4.2	7.9
3		7.6	21.8								4.05	7.45
4		7.2	21.2					9.7			4.0	7.1
5					21.3			9.7			3.95	6.8
6	3.9				20.7					3.5	3.9	6.85
7	3.9			10.6						3.4	4.05	7.1
8				14.8					3.6		5.2	7.4
9									3.6		6.8	7.5
10			22.6			14.7					8.7	7.35
11			23.6			15.1		5.5			10.9	6.85
12								5.4			10.3	9.3
13	3.7									3.1	11.25	14.1
14	3.7			22.1			20.9			3.1	12.5	15.95
15				23.2			21.2		5.3		14.45	17.3
16									4.8		16.05	18.05
17		18.0	22.7								17.15	18.4
18		18.5	22.0					4.7			17.4	18.1
19					17.4			4.6			17.7	17.3
20	3.6				16.5					8.5	18.0	15.45
21	3.6			26.6			18.7			10.1	18.2	12.2
22				26.5			18.0		4.6		16.6	9.95
23						18.2			5.5		14.9	9.4
24		21.5	9.6			18.8					15.2	8.5
25		22.2	11.3					4.0			15.8	8.1
26					9.2			3.9			16.2	8.6
27	5.8				10.1					7.4	16.0	8.45
28	5.8			25.1			14.5			6.9	14.9	8.3
29				24.3			11.3		4.8		12.6	8.3
30						10.3			4.4		10.05	8.0
31			9.8									7.7
1910												
1	7.6	16.9	21.85	6.2	7.8	19.95	8.0	5.9	6.1	7.9	4.9	4.9
2	8.45	14.35	22.9	6.05	7.2	19.35	7.0	5.5	5.5	6.4	4.75	9.5
3	9.0	11.6	24.2	6.2	8.7	18.7	7.45	5.3	5.45	5.85	4.7	10.75
4	9.0	10.5	24.7	6.1	9.05	18.0	7.9	5.6	7.0	6.25	4.65	10.5
5	9.1	10.8	25.0	6.55	10.1	17.55	8.35	6.5	17.45	10.5	4.55	9.25
6	10.15	11.9	25.25	7.15	10.95	17.95	10.45	6.65	20.75	18.7	4.5	8.2
7	11.15	11.7	25.15	7.15	13.6	18.25	12.25	6.7	22.8	20.4	4.45	7.3
8	11.6	10.65	24.7	7.6	12.9	18.4	12.65	6.4	23.8	21.35	4.4	6.85
9	11.5	9.55	23.95	7.3	12.65	17.9	11.05	6.0	23.85	21.85	4.4	6.45
10	10.7	8.85	23.1	6.65	13.8	15.3	9.6	5.4	23.65	22.55	4.3	5.9
11	9.7	8.45	22.4	6.3	14.5	12.9	8.4	5.1	23.25	22.9	4.3	5.85
12	8.9	8.2	21.75	6.1	14.45	11.3	9.3	4.9	22.85	23.0	4.2	5.65
13	14.4	7.9	21.1	5.85	13.7	10.65	10.55	4.65	22.15	23.0	4.25	5.55

DAILY GAGE HEIGHT, IN FEET, OF KASKASKIA RIVER AT NEW ATHENS, ILLINOIS, FOR 1907–11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1910												
14	18.9	7.75	20.35	5.6	13.8	10.0	9.0	4.45	21.05	22.55	4.2	5.45
15	20.1	7.85	17.5	6.8	14.9	9.0	7.5	4.3	18.2	21.85	4.1	5.0
16	20.8	8.3	14.5	7.55	14.9	7.95	11.7	4.2	12.55	19.9	4.15	5.0
17	21.65	8.75	10.8	11.65	14.25	7.45	14.65	4.1	9.4	14.4	4.05	4.85
18	22.1	8.4	9.45	13.85	13.75	7.8	15.7	4.1	8.1	9.3	4.05	4.7
19	22.45	8.8	8.85	14.95	12.7	7.4	16.35	4.0	7.25	7.7	4.05	4.65
20	22.65	8.65	8.35	14.85	11.2	6.65	17.1	4.5	6.7	7.05	3.95	4.7
21	22.65	8.7	8.05	12.85	10.1	6.1	17.15	5.8	6.25	6.65	4.0	4.9
22	22.55	8.95	7.75	10.05	9.3	7.6	16.7	7.35	5.9	6.35	3.9	4.4
23	22.45	9.1	7.5	8.45	13.9	7.95	15.7	12.65	5.65	6.1	3.95	4.4
24	22.3	10.0	7.3	7.65	18.65	6.75	14.4	17.45	5.45	5.95	3.95	4.5
25	21.8	11.0	7.4	7.15	19.75	6.0	12.1	18.35	5.55	5.8	3.85	4.65
26	21.2	11.4	7.75	6.8	20.5	5.65	9.55	19.15	6.45	5.65	3.9	4.35
27	20.5	17.9	7.8	6.8	21.4	5.55	8.9	19.15	6.3	5.5	3.85	4.3
28	19.8	.....	7.7	6.8	21.5	6.6	8.75	17.95	6.4	5.25	3.85	4.3
29	19.1	.....	7.25	6.9	21.4	7.3	7.65	14.95	10.0	5.2	3.85	4.5
30	18.5	.....	6.75	7.55	21.15	7.95	7.5	11.25	10.15	5.1	3.8	4.75
31	17.6	.....	6.4	.....	20.5	.....	6.65	7.4	.....	4.95	.....	5.2
1911												
1	6.7	14.2	18.0	9.25	22.6	5.55	4.2	2.6	2.75	19.35	10.4	11.5
2	8.1	13.9	17.8	8.3	24.55	5.35	3.95	2.6	2.7	19.75	9.7	11.0
3	8.5	13.65	16.85	7.75	24.8	5.25	3.9	3.8	2.65	20.0	9.2	10.3
4	9.6	13.25	14.6	7.5	24.4	5.15	3.75	3.15	2.6	20.0	8.7	9.65
5	9.9	12.75	12.0	8.5	24.1	5.1	3.6	3.05	2.6	19.8	8.3	9.2
6	10.55	12.1	10.55	11.8	23.7	5.0	3.45	3.45	2.6	19.8	8.0	8.9
7	10.7	11.5	10.45	15.0	23.3	4.75	3.35	3.3	4.1	19.95	8.1	8.6
8	10.35	11.55	12.8	16.45	22.7	4.55	3.25	3.5	7.65	20.35	8.9	8.3
9	9.2	12.1	15.45	16.5	21.9	4.45	3.15	3.0	7.55	20.95	10.7	8.05
10	8.25	12.1	17.0	15.7	20.9	4.35	3.1	3.2	6.8	21.6	11.0	7.85
11	7.7	11.55	17.95	14.85	18.35	4.25	4.35	3.5	6.8	22.2	10.1	7.9
12	8.0	10.65	18.5	14.45	12.6	4.1	4.0	5.6	6.75	22.75	9.2	8.4
13	8.0	9.75	18.55	16.35	9.55	4.05	3.5	6.05	8.3	23.05	12.8	10.2
14	7.5	9.15	17.9	18.85	8.6	4.0	3.2	5.25	7.9	23.1	15.3	11.8
15	7.2	8.7	17.0	19.75	8.05	3.95	3.15	4.15	6.45	22.9	16.55	11.25
16	7.2	8.5	16.1	19.9	7.6	3.9	3.3	3.5	5.4	22.65	16.95	10.05
17	9.05	8.75	14.85	20.1	7.25	3.9	3.2	3.15	8.2	22.35	16.5	10.05
18	11.05	10.25	12.7	20.3	6.95	3.85	3.05	3.0	13.95	21.95	15.5	11.1
19	12.05	12.6	10.85	20.5	6.7	3.8	2.95	2.8	15.8	21.55	15.05	12.55
20	12.9	15.3	10.05	20.35	6.45	3.7	2.9	2.75	16.35	21.05	15.9	13.1
21	13.25	16.7	9.55	19.95	6.25	3.65	2.85	2.7	16.5	20.5	16.55	12.9
22	12.65	17.5	9.2	19.5	8.05	3.6	2.8	3.2	16.2	19.35	16.3	14.4
23	11.15	17.8	8.75	19.0	7.25	3.55	2.75	2.9	14.95	16.2	15.7	16.0
24	9.75	17.8	8.3	18.4	6.9	3.55	2.75	2.75	12.3	14.25	15.4	17.05
25	9.1	17.55	7.85	17.9	8.95	3.5	2.7	2.65	9.5	14.7	15.5	17.4
26	8.8	17.5	7.7	17.4	8.75	3.5	2.7	2.6	8.8	14.5	15.35	16.6
27	8.45	17.65	8.25	16.95	7.65	3.95	2.65	2.55	15.7	14.15	14.95	14.55
28	8.2	17.85	9.2	15.85	6.75	4.0	2.65	2.5	17.55	13.9	14.05	13.0
29	8.45	.....	10.45	12.85	6.15	5.05	2.6	2.65	18.4	13.5	12.9	13.35
30	12.05	.....	11.4	19.35	5.8	4.7	2.6	2.9	18.95	12.5	11.95	13.6
31	14.2	.....	10.65	.....	5.85	.....	2.6	2.75	.....	11.3	.....	13.2

NOTE—Ice conditions existed December 8–31, 1909, January 1–3, 1910, and January 3–10, 1911. Gage read to top of ice December 31, 1909, and January 3–10, 1910, and January 4–10, 1911.

RATING TABLE FOR KASKASKIA RIVER AT NEW ATHENS, ILLINOIS, FROM NOVEMBER 1, 1909–DECEMBER 31, 1911

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
2.00	110	3.20	250	4.40	454	5.50	710
2.10	120	3.30	264	4.50	474	5.60	738
2.20	130	3.40	280	4.60	494	5.70	770
2.30	140	3.50	296	4.70	516	5.80	802
2.40	150	3.60	312	4.80	538	5.90	836
2.50	162	3.70	328	4.90	560	6.00	870
2.60	174	3.80	344	5.00	582	6.10	904
2.70	186	3.90	360	5.10	606	6.20	938
2.80	198	4.00	378	5.20	630	6.30	974
2.90	210	4.10	396	5.30	656	6.40	1,010
3.00	222	4.20	414	5.40	682		
3.10	236	4.30	434				

RATING TABLE FOR KASKASKIA RIVER AT NEW ATHENS, ILLINOIS, FROM NOVEMBER 1, 1909–DECEMBER 31, 1911—*Concluded*

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
6.50	1,048	10.70	3,135	14.90	5,650	19.10	9,230
6.60	1,086	10.80	3,190	15.00	5,720	19.20	9,340
6.70	1,126	10.90	3,245	15.10	5,790	19.30	9,460
6.80	1,166	11.00	3,300	15.20	5,860	19.40	9,580
6.90	1,208	11.10	3,355	15.30	5,930	19.50	9,700
7.00	1,250	11.20	3,410	15.40	6,000	19.60	9,820
7.10	1,292	11.30	3,465	15.50	6,070	19.70	9,940
7.20	1,336	11.40	3,520	15.60	6,150	19.80	10,070
7.30	1,380	11.50	3,575	15.70	6,230	19.90	10,200
7.40	1,424	11.60	3,630	15.80	6,310	20.00	10,330
7.50	1,468	11.70	3,685	15.90	6,390	20.10	10,470
7.60	1,514	11.80	3,740	16.00	6,470	20.20	10,620
7.70	1,560	11.90	3,795	16.10	6,545	20.30	10,780
7.80	1,606	12.00	3,850	16.20	6,620	20.40	10,950
7.90	1,652	12.10	3,905	16.30	6,700	20.50	11,140
8.00	1,700	12.20	3,960	16.40	6,780	20.60	11,350
8.10	1,750	12.30	4,015	16.50	6,860	20.70	11,570
8.20	1,800	12.40	4,070	16.60	6,940	20.80	11,810
8.30	1,850	12.50	4,130	16.70	7,020	20.90	12,070
8.40	1,900	12.60	4,190	16.80	7,100	21.00	12,350
8.50	1,950	12.70	4,250	16.90	7,180	21.10	12,695
8.60	2,000	12.80	4,310	17.00	7,260	21.20	13,040
8.70	2,050	12.90	4,370	17.10	7,345	21.30	13,385
8.80	2,100	13.00	4,430	17.20	7,430	21.40	13,730
8.90	2,150	13.10	4,490	17.30	7,515	21.50	14,075
9.00	2,200	13.20	4,550	17.40	7,600	21.60	14,420
9.10	2,255	13.30	4,610	17.50	7,685	21.70	14,765
9.20	2,310	13.40	4,670	17.60	7,770	21.80	15,110
9.30	2,365	13.50	4,730	17.70	7,860	21.90	15,455
9.40	2,420	13.60	4,790	17.80	7,950	22.00	15,800
9.50	2,475	13.70	4,850	17.90	8,040	23.00	19,250
9.60	2,530	13.80	4,910	18.00	8,130	24.00	22,700
9.70	2,585	13.90	4,970	18.10	8,220	25.00	26,150
9.80	2,640	14.00	5,030	18.20	8,310	26.00	29,600
9.90	2,695	14.10	5,090	18.30	8,410	27.00	33,050
10.00	2,750	14.20	5,160	18.40	8,510	28.00	36,500
10.10	2,805	14.30	5,230	18.50	8,610	29.00	39,950
10.20	2,860	14.40	5,300	18.60	8,710	30.00	43,400
10.30	2,915	14.50	5,370	18.70	8,810	31.00	46,850
10.40	2,970	14.60	5,440	18.80	8,910	32.00	50,300
10.50	3,025	14.70	5,510	18.90	9,010	33.00	53,750
10.60	3,080	14.80	5,580	19.00	9,120		

NOTE—The above table is not applicable for ice or obstructed channel conditions. It is based on twenty discharge measurements made during 1909–1911, and is well defined between gage heights 4.0 feet and 21.0 feet. Above gage height 21.0 feet the rating curve is extended on a tangent, the difference being 345 per tenth.

DAILY DISCHARGE, IN SECOND-FEET, OF KASKASKIA RIVER AT NEW ATHENS, ILLINOIS, FOR 1907–11

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1907												
1					6,070			4,790				
2					7,680					378		
3				2,580						378		
4				2,260					1,090			494
5						9,230			1,010			454
6		8,130	3,680			9,940					1,170	
7		7,860	2,800					1,420			1,010	
8					3,360			2,050				
9					3,900					2,640		
10							1,510			770		
11				1,650			1,090		738			606
12						14,100			682			656
13		974	6,070			17,200					454	
14		770	9,820					7,260			434	
15					5,090			6,470				
16					7,680					454		
17				1,470			1,510			414		
18				1,290			1,650					1,090
19						18,600						1,560

DAILY DISCHARGE, IN SECOND-FEET, OF KASKASKIA RIVER AT NEW ATHENS, ILLINOIS, FOR 1907-11—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1907												
20		1,650	16,500			13,000					802	
21		1,510	13,400					4,250			560	
22					5,090			6,150				
23	24,100				5,790					360		
24	23,700			2,920			4,790			344		
25				3,630			6,150		454			5,860
26						2,800			454			7,020
27		120	8,040			3,360					682	
28		2,260	7,770					4,730			630	
29					2,860			3,190				
30	24,100				2,150					434		
31	9,120						6,150			454		
1908												
1	6,620			5,090			5,580			296		
2	4,790			5,090			5,090		344			682
3									344			560
4			23,700								264	
5		3,020	23,400					682			264	
6		6,860			24,400			682				
7					34,100							
8	4,190			6,860			5,300					
9	3,190			8,910			4,730		344			360
10						5,510			328			344
11						5,790					264	
12		10,300						738			264	
13		9,820			54,400			974				
14					51,000					296		
15	7,340			10,500			2,920			296		
16	8,130			9,460			2,420		312			312
17						7,680			312			296
18			17,900			7,520					264	
19		22,300	16,500					516			264	
20		25,100			24,400			494				
21					22,000					264		
22	3,240			4,310			2,050			264		
23	3,020			3,740			2,100					280
24						7,680						296
25			7,340			7,430						
26		24,100	5,090					396				
27		23,700			22,400			378				
28					20,600					264		
29	1,700			12,700			3,900			264		
30	1,510			19,600			3,190		296			
31												
1909												
1				2,260			3,580		280		444	2,000
2									264		414	1,650
3		1,510	15,100								387	1,450
4		1,340	13,000					2,580			378	1,290
5					13,400			1,560			369	1,170
6	360				11,600					296	360	1,190
7	360			3,080						280	387	1,290
8				5,580					312		630	1,420
9									312		1,170	1,470
10			17,900			5,510					2,050	1,400
11			21,300			5,790		710			3,240	1,190
12								682			2,920	2,360
13	328									236	3,440	5,090
14	328			16,100			12,100			236	4,130	6,430
15				19,900			13,000		656		5,340	7,520
16									538		6,510	8,180
17		8,130	18,200								7,390	8,510
18		8,610	15,800					516			7,600	8,220
19					7,600			494			7,860	7,520
20	312				6,860					1,950	8,130	6,040
21	312			31,700			8,810			2,800	8,310	3,960
22				31,300			8,130		494		6,940	2,720
23						8,310			710		5,650	2,420
24		14,100	2,530			8,910					5,860	1,950
25		16,500	3,460					378			6,310	1,750
26					2,310			360			6,620	2,000
27	802				2,800					1,420	6,470	1,920
28	802			26,500			5,370			1,210	5,650	1,600
29				23,700			3,460		538		4,190	1,450
30						2,920			454		2,780	1,300
31			2,640									1,200

DAILY DISCHARGE, IN SECOND-FEET, OF KASKASKIA RIVER AT NEW ATHENS, ILLINOIS, FOR 1907–11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1910												
1	1,510	7,180	15,300	938	1,610	10,300	1,700	836	904	1,650	560	560
2	1,920	5,260	18,900	887	1,340	9,520	1,250	710	710	1,010	527	2,480
3	2,200	3,630	23,400	938	2,050	8,810	1,450	656	696	819	516	3,160
4	2,200	3,020	25,100	904	2,230	8,130	1,650	738	1,250	956	505	3,020
5	2,250	3,190	26,200	1,070	2,800	7,730	1,880	1,050	7,640	3,020	484	2,340
6	2,830	3,800	27,000	1,310	3,270	8,080	3,000	1,110	11,700	8,810	474	1,800
7	3,380	3,680	26,700	1,310	4,790	8,360	3,990	1,130	18,600	11,000	464	1,380
8	3,630	3,110	25,100	1,510	4,370	8,510	4,220	1,010	22,000	13,600	454	1,190
9	3,580	2,500	22,500	1,380	4,220	8,040	3,330	870	22,200	15,300	454	1,030
10	3,140	2,120	19,600	1,110	4,910	5,930	2,530	682	21,500	17,700	434	836
11	2,580	1,920	17,200	974	5,370	4,370	1,900	606	20,100	18,900	434	819
12	2,150	1,800	14,900	904	5,340	3,460	2,360	560	18,700	19,200	414	754
13	5,300	1,650	12,700	819	4,850	3,110	3,050	505	16,300	19,200	424	724
14	9,010	1,580	10,900	738	4,910	2,750	2,200	464	12,500	17,700	414	696
15	10,500	1,630	7,680	1,170	5,650	2,200	1,470	434	8,310	15,300	396	582
16	11,800	1,850	5,370	1,490	5,650	1,680	3,680	414	4,160	10,200	405	582
17	14,600	2,080	3,190	3,660	5,200	1,450	5,480	396	2,420	5,300	387	549
18	16,100	1,900	2,450	4,940	4,880	1,610	6,230	396	1,750	2,360	387	516
19	17,400	2,100	2,120	5,680	4,250	1,420	6,740	378	1,360	1,560	387	505
20	18,000	2,020	1,880	5,620	3,410	1,110	7,340	474	1,130	1,270	369	516
21	18,000	2,050	1,720	4,340	2,800	904	7,390	802	956	1,110	378	560
22	17,700	2,180	1,580	2,780	2,360	1,510	7,020	1,400	836	992	360	454
23	17,400	2,260	1,470	1,920	4,970	1,680	6,230	4,220	754	904	369	454
24	16,800	2,750	1,380	1,540	8,760	1,150	5,300	7,640	696	853	369	474
25	15,100	3,300	1,420	1,310	10,000	870	3,900	8,460	724	802	352	505
26	13,000	3,520	1,580	1,170	11,100	754	2,500	9,280	1,030	754	360	444
27	11,100	8,040	1,600	1,170	13,700	724	2,150	9,280	974	710	352	434
28	10,100	10,200	1,560	1,170	14,100	1,090	2,080	8,080	1,010	643	352	434
29	9,230	.....	1,360	1,210	13,700	1,380	1,540	5,680	2,750	630	352	474
30	8,610	.....	1,150	1,490	12,900	1,680	1,470	3,440	2,830	606	344	527
31	7,770	.....	1,010	.....	11,100	.....	1,110	1,420	.....	571	.....	630
1911												
1	1,130	5,160	8,130	2,340	17,900	724	414	174	192	9,520	2,970	3,580
2	1,750	4,970	7,950	1,850	24,600	669	369	174	186	10,000	2,580	3,300
3	1,950	4,820	7,140	1,580	25,500	643	360	344	180	10,300	2,310	2,920
4	1,900	4,580	5,440	1,470	24,100	618	336	243	174	10,300	2,050	2,560
5	1,850	4,280	3,850	1,950	23,000	606	312	229	174	10,100	1,850	2,310
6	1,800	3,900	3,050	3,740	21,700	582	288	288	174	10,100	1,700	2,150
7	1,750	3,580	3,000	5,720	20,300	527	272	264	396	10,300	1,750	2,000
8	1,700	3,600	4,310	6,820	18,200	484	257	296	1,540	10,900	2,150	1,850
9	1,650	3,900	6,040	6,860	15,500	464	243	222	1,490	12,200	3,140	1,720
10	1,600	3,900	7,260	6,230	12,100	444	236	250	1,170	14,400	3,300	1,630
11	1,560	3,600	8,080	5,620	8,460	424	444	296	1,170	16,500	2,800	1,650
12	1,700	3,110	8,610	5,340	4,190	396	378	738	1,150	18,400	2,310	1,900
13	1,700	2,610	8,660	6,740	2,500	387	296	887	1,850	19,400	4,310	2,860
14	1,470	2,280	8,040	8,960	2,000	378	250	643	1,650	19,600	5,930	3,740
15	1,340	2,050	7,260	10,000	1,720	369	243	405	1,030	18,900	6,900	3,440
16	1,340	1,950	6,540	10,200	1,510	360	264	296	682	18,000	7,220	2,780
17	2,230	2,080	5,620	10,500	1,360	360	250	243	1,800	17,000	6,860	2,780
18	3,330	2,890	4,250	10,800	1,230	352	229	222	5,000	15,600	6,070	3,360
19	3,880	4,190	3,220	11,100	1,130	344	216	198	6,310	14,200	5,760	4,160
20	4,370	5,930	2,780	10,900	1,030	328	210	192	6,740	12,500	6,390	4,490
21	4,580	7,020	2,500	10,300	956	320	204	186	6,860	11,100	6,900	4,370
22	4,220	7,680	2,310	9,700	1,720	312	198	250	6,620	9,520	6,700	5,300
23	3,380	7,950	2,080	9,120	1,360	304	192	210	5,680	6,620	6,230	6,470
24	2,610	7,950	1,850	8,510	1,210	304	192	192	4,020	5,200	6,000	7,300
25	2,260	7,730	1,630	8,040	2,180	296	186	180	2,480	5,510	6,070	7,600
26	2,100	7,680	1,560	7,600	2,080	296	186	174	2,100	5,370	5,960	6,940
27	1,920	7,820	1,820	7,220	1,540	369	180	168	6,230	5,120	5,680	5,400
28	1,800	8,000	2,310	6,350	1,150	378	180	162	7,730	4,970	5,060	4,430
29	1,920	.....	3,000	4,340	921	594	174	180	8,510	4,730	4,370	4,640
30	3,880	.....	3,520	9,520	802	516	174	210	9,060	4,130	3,820	4,790
31	5,160	.....	3,110	.....	819	.....	174	192	.....	3,460	.....	4,550

NOTE—Discharges estimated because of ice December 28–31, 1909, and January 4–10, 1911.

MONTHLY DISCHARGE OF KASKASKIA RIVER AT NEW ATHENS, ILLINOIS, FOR 1907–11

[Drainage area, 5,220 square miles]

Month	Discharge in second-feet				Runoff—depth in inches on drainage area	Accuracy
	Maximum	Minimum	Mean	Per square mile		
1907						
January			20,300	3.89	4.48	C.
February			2,910	.557	.58	B.
March			8,510	1.63	1.88	B.
April			2,190	.420	.47	B.
May			4,970	.952	1.10	B.
June			11,000	2.11	2.35	B.
July			3,260	.625	.72	B.
August			4,480	.858	.99	B.
September			738	.141	.16	B.
October			663	.127	.15	B.
November			718	.138	.15	B.
December			2,220	.425	.49	B.
The year			5,160	.989	13.52	
1908						
January			4,370	.837	.96	B.
February			15,600	2.99	3.22	B.
March			15,700	3.01	3.47	B.
April			8,630	1.65	1.84	B.
May			31,700	6.07	7.00	B.
June			6,940	1.33	1.48	B.
July			3,730	.715	.82	B.
August			608	.116	.13	B.
September			326	.062	.07	B.
October			278	.053	.06	C.
November			264	.051	.06	C.
December			391	.075	.09	B.
The year			7,380	1.41	19.20	
1909						
January			450	.086	.10	B.
February			8,360	1.60	1.67	B.
March			12,200	2.34	2.70	B.
April			17,800	3.41	3.80	B.
May			7,430	1.42	1.64	B.
June			6,290	1.20	1.34	B.
July			7,780	1.49	1.72	B.
August			910	.174	.20	B.
September			456	.087	.10	B.
October			1,050	.201	.23	B.
November	8,310	360	4,060	.778	.87	A.
December	8,510		3,150	.603	.70	C.
The year			5,830	1.12	15.07	
1910						
January	18,000	1,510	9,000	1.72	1.98	B.
February	10,200	1,580	3,230	.619	.64	A.
March	27,000	1,010	10,500	2.01	2.32	A.
April	5,680	738	1,850	.354	.40	A.
May	14,100	1,340	6,020	1.15	1.33	A.
June	10,300	724	3,940	.755	.84	A.
July	7,390	1,110	3,420	.655	.76	A.
August	9,280	378	2,360	.452	.52	A.
September	22,200	696	6,880	1.32	1.47	A.
October	19,200	571	6,240	1.19	1.37	A.
November	560	344	416	.080	.09	A.
December	3,160	434	949	.182	.21	A.
The year	27,000	344	4,590	.879	11.93	
1911						
January	5,160	1,130	2,380	.456	.53	B.
February	8,000	1,950	4,830	.925	.96	B.
March	8,660	1,560	4,670	.895	1.03	B.
April	11,100	1,470	6,980	1.34	1.50	A.
May	25,500	802	7,830	1.50	1.73	A.
June	724	296	438	.084	.09	A.
July	444	174	255	.049	.06	C.

MONTHLY DISCHARGE OF KASKASKIA RIVER AT NEW ATHENS, ILLINOIS, FOR 1907-11—*Concluded*

Month	Discharge in second-feet				Runoff—depth in inches on drainage area	Accuracy
	Maximum	Minimum	Mean	Per square mile		
1911						
August	887	162	281	.054	.06	C.
September	9,060	174	3,060	.590	.66	A.
October	19,600	3,460	11,100	2.13	2.46	B.
November	7,220	1,700	4,500	.862	.96	B.
December	7,600	1,630	3,770	.722	.83	B.
The year	25,500	162	4,180	.801	10.87	

NOTE—Monthly discharges for January, 1907, to October, 1909, are based on means for days when gage was read.

SHOAL CREEK NEAR BREESE, ILLINOIS

Location.—At the Baltimore and Ohio Southwestern Railroad bridge about 1½ miles east of Breese, Ill., and about 3 miles above the mouth of Beaver Creek.

Records available.—November 5, 1909, to December 31, 1911.

Drainage area.—Seven hundred and sixty square miles.

Gage.—Standard chain gage attached to bridge; datum unchanged.

Channel.—Permanent; rough, due to rock placed in bed of stream to prevent scour.

Discharge measurements.—Made from upstream side of bridge and also from downstream side of wooden trestle during floods. There is a good wading section just above the regular section.

Floods.—The maximum gage height since establishment of the gage is 19.6 feet which occurred in October, 1911. No records of floods prior to establishment of gage are available.

Winter flow.—The relation between gage height and discharge may be slightly affected by ice during short periods in December, January, and February.

Regulation.—The intake of the Breese pumping system is about one-quarter mile above the section but the diversion is negligible.

Remarks.—The stream is fed by springs and has never been known to go dry at this point.

DISCHARGE MEASUREMENTS OF SHOAL CREEK NEAR BREESE, ILLINOIS, 1909-11

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1909		*Feet*	*Square feet*	*Feet*	*Second feet*
October 29	H. J. Jackson	59	62	1.77	96
November 19	H. J. Jackson	126	1,280	15.93	2,720
December 2	H. J. Jackson	68	102	2.54	166
1910					
March 25	H. J. Jackson	60	63	1.80	116
May 19	C. T. Bailey	66	98	2.40	*270
May 26	C. T. Bailey	586	2,440	17.36	†4,080
May 28	C. T. Bailey	136	1,440	17.12	3,470
May 31	C. T. Bailey	90	863	11.85	1,940
June 2	C. T. Bailey	74	195	3.95	387

DISCHARGE MEASUREMENTS OF SHOAL CREEK NEAR BREESE, ILLINOIS—*Concluded*

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1910		*Feet*	*Sq. ft.*	*Feet*	*Sec.-ft.*
June 3	C. T. Bailey	70	143	3.24	278
July 29	H. J. Jackson	60	56	1.72	98
December 7	Bailey & Monk	57	38.4	1.50	‡42.4
1911					
March 16	P. S. Monk	67	100	2.60	185
October 20	Monk & Brown	61	54.1	1.78	116

* Partly estimated.
† No flow in flood channel.
‡ Slight amount of ice present.

DAILY GAGE HEIGHT IN FEET OF SHOAL CREEK NEAR BREESE, ILLINOIS, FOR 1909-11

[John Nordman, observer]

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
1												2.6
2												2.2
3												2.5
4												2.2
5											1.7	2.5
6											1.6	2.95
7											1.7	3.2
8											2.6	2.9
9											11.5	2.3
10											7.5	2.25
11											3.3	3.2
12											2.9	5.6
13											13.55	12.9
14											15.5	14.5
15											15.1	11.5
16											15.8	8.95
17											16.4	6.5
18											16.1	5.7
19											15.4	5.2
20											8.5	.....
21											5.2	.....
22											6.5	.....
23											9.7	4.15
24											11.1	.....
25											7.9	.....
26											4.6	.....
27											3.5	.....
28											2.9	.....
29											2.9	.....
30											2.7	2.8
31												.....
1910												
1	.....	2.7	17.6	1.7	2.2	6.2	1.9	1.6	1.8	2.4	1.7	1.9
2	3.4	2.3	18.9	1.7	2.15	5.1	1.85	1.4	1.85	2.1	1.6	1.7
3	3.9	2.2	19.0	1.7	7.8	3.0	2.1	1.5	1.8	1.85	1.65	1.55
4	4.2	5.15	18.1	1.65	13.3	5.2	1.9	1.55	13.3	2.7	1.65	1.6
5	5.0	4.9	16.6	1.65	12.1	13.7	4.9	1.5	14.7	5.4	1.6	1.55
6	6.7	3.8	11.4	3.1	10.4	14.5	7.65	1.5	15.75	16.3	1.65	1.55
7	8.4	2.9	7.5	5.15	7.2	7.4	6.8	1.5	16.8	16.95	1.6	1.45
8	6.6	2.6	5.3	2.8	8.0	4.5	3.7	1.5	16.95	18.2	1.65	1.5
9	5.4	2.3	4.0	2.3	10.6	3.7	2.0	1.55	15.8	18.85	1.65	1.5
10	3.85	2.2	3.6	2.1	7.2	4.0	2.1	1.5	12.2	18.0	1.6	1.5
11	3.4	2.15	2.9	1.8	5.1	3.2	2.8	1.5	8.1	10.4	1.6	1.5
12	3.2	2.1	2.55	1.8	4.2	2.6	2.0	1.5	3.3	7.0	1.55	1.45
13	14.4	2.05	2.3	1.8	8.1	2.3	2.1	1.5	2.3	4.2	1.6	1.45
14	16.0	2.0	2.25	1.85	12.4	2.0	2.2	1.5	2.2	3.8	1.6	1.45
15	16.9	2.25	2.15	2.6	7.2	3.2	1.9	1.45	2.15	3.5	1.55	1.4
16	17.1	2.8	2.1	8.2	5.2	5.3	9.9	1.45	2.1	3.2	1.6	1.4
17	17.9	3.7	2.05	13.4	2.9	6.4	13.5	1.5	1.9	2.1	1.55	1.4
18	17.3	3.2	2.0	14.8	2.6	2.3	15.95	2.1	1.85	2.0	1.6	1.4
19	16.6	2.4	2.0	13.55	2.45	2.15	16.2	3.2	1.8	1.95	1.6	1.4
20	16.65	2.2	1.95	7.15	2.25	7.7	11.3	5.1	1.7	1.9	1.55	1.4
21	16.3	2.4	1.9	4.2	2.1	9.0	5.8	3.8	1.7	1.9	1.6	1.4

DAILY GAGE HEIGHT, IN FEET, OF SHOAL CREEK NEAR BREESE, ILLINOIS, FOR 1909-11—*Concluded*

Day	Jan	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1910												
22	12.2	2.7	1.95	3.1	3.2	4.7	3.4	5.4	1.75	1.9	1.55	1.4
23	7.1	3.8	1.95	2.6	14.0	2.1	3.2	11.2	1.75	1.9	1.6	1.4
24	5.2	3.7	1.9	2.3	15.8	1.9	3.1	16.5	2.1	1.9	1.6	1.4
25	3.9	2.85	1.9	2.4	16.3	1.8	2.0	16.9	4.2	1.85	1.55	1.4
26	3.5	3.2	1.85	2.35	17.1	1.85	1.9	15.6	9.4	1.85	1.6	1.4
27	3.7	7.8	1.85	2.5	17.85	2.9	1.75	7.9	12.6	1.8	1.55	1.4
28	4.1	16.4	1.8	2.7	17.5	6.1	1.4	4.1	12.0	1.8	1.65	1.55
29	3.9	.....	1.8	2.5	10.5	3.2	1.7	2.8	4.5	1.75	2.8	2.0
30	3.7	.....	1.75	2.25	8.2	2.0	1.65	2.1	2.5	1.7	2.05	5.1
31	3.0	.....	1.75	.....	12.5	.....	1.6	1.9	.....	1.65	.....	4.7
1911												
1	2.1	3.4	8.5	2.0	16.4	1.6	1.4	1.15	1.3	11.2	1.7	2.2
2	2.9	3.1	4.4	1.95	16.55	1.55	1.4	1.1	1.25	12.45	1.7	2.1
3	4.5	2.5	3.65	2.25	16.9	1.5	1.4	1.1	1.2	15.6	1.7	2.05
4	3.6	2.0	3.2	3.7	16.95	1.5	1.4	1.15	1.2	17.6	1.7	2.0
5	3.0	1.9	2.85	8.3	14.5	1.5	1.4	1.15	1.4	19.55	1.7	2.0
6	2.3	2.7	2.7	13.3	6.2	1.45	1.35	1.1	2.1	19.2	2.0	1.9
7	1.95	4.1	6.05	11.2	5.3	1.4	1.35	1.1	2.8	18.2	5.8	1.9
8	1.85	6.2	14.35	5.6	3.25	1.4	1.35	1.1	3.6	16.85	5.2	1.9
9	1.7	3.9	15.7	4.1	2.8	1.3	1.3	2.4	5.35	10.2	4.7	1.9
10	1.7	2.8	15.95	3.75	2.2	1.3	1.25	4.2	3.7	5.7	2.1	2.1
11	1.7	2.45	11.75	2.4	1.95	1.3	1.2	3.9	3.9	3.85	1.9	3.2
12	1.7	2.2	6.4	2.3	1.4	1.25	1.2	2.65	3.6	3.2	4.5	5.4
13	1.85	1.95	3.75	7.15	1.35	1.25	1.2	2.1	3.55	2.45	12.1	4.0
14	2.1	2.1	3.7	12.05	1.9	1.25	1.2	1.9	3.5	2.2	12.0	2.75
15	1.85	2.55	3.15	15.2	1.85	1.25	1.15	1.45	3.25	2.15	6.3	2.5
16	5.7	3.45	2.6	15.7	1.8	1.25	1.15	1.4	6.1	2.0	4.4	3.1
17	3.3	4.8	2.4	9.5	1.8	1.25	1.15	1.35	12.6	1.9	4.0	3.7
18	2.8	6.85	2.35	5.9	1.7	1.25	1.15	1.3	12.4	1.85	10.5	4.9
19	2.1	9.2	2.5	5.7	1.6	1.25	1.15	1.2	9.2	1.8	12.8	3.4
20	1.9	13.8	2.3	5.2	1.55	1.25	1.15	1.2	6.15	1.8	9.1	4.1
21	1.85	12.85	2.1	4.9	1.5	1.25	1.15	1.2	2.9	1.85	5.85	8.8
22	1.75	10.1	2.0	4.5	1.7	1.25	1.15	1.2	1.95	2.7	3.6	13.6
23	1.7	6.85	1.95	4.2	1.65	1.25	1.15	1.2	1.7	8.75	3.45	12.9
24	1.75	6.75	1.9	3.9	1.5	1.3	1.15	1.2	1.65	5.25	3.4	8.9
25	1.85	6.7	1.8	3.7	1.6	1.4	1.1	1.2	6.2	2.9	3.0	7.2
26	1.8	10.2	1.85	3.4	1.55	2.5	1.1	1.2	13.9	2.4	2.7	3.8
27	1.95	13.2	4.65	2.05	1.4	2.2	1.1	1.2	14.9	2.0	2.35	5.2
28	6.6	13.75	5.6	2.2	1.3	1.7	1.05	1.35	12.2	1.9	2.2	9.4
29	12.4	.....	3.4	4.25	1.3	1.55	1.05	1.5	7.8	1.9	2.0	5.1
30	7.45	.....	2.2	7.6	1.4	1.4	1.2	1.6	10.55	1.8	2.4	3.5
31	4.1	.....	2.1	.....	1.45	.....	1.15	1.55	.....	1.75	.....	4.2

NOTE—Ice conditions December 8 to 31, 1909, and January 1 to 18, 1910. Gage read to top of ice January 10 to 18, 1910. No frozen conditions reported by observer in 1911. Relation of gage height to discharge probably not affected by ice during 1911.

RATING TABLE FOR SHOAL CREEK NEAR BREESE, ILLINOIS, FROM NOVEMBER 5, 1909 TO DECEMBER 31, 1911

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.00	44	2.60	183	4.20	434	5.80	714
1.10	51	2.70	195	4.30	451	5.90	732
1.20	58	2.80	208	4.40	468	6.00	750
1.30	66	2.90	221	4.50	485	6.10	768
1.40	74	3.00	235	4.60	502	6.20	786
1.50	82	3.10	251	4.70	519	6.30	804
1.60	90	3.20	267	4.80	536	6.40	822
1.70	98	3.30	283	4.90	553	6.50	840
1.80	106	3.40	299	5.00	570	6.60	858
1.90	114	3.50	315	5.10	588	6.70	876
2.00	123	3.60	332	5.20	606	6.80	894
2.10	132	3.70	349	5.30	624	6.90	912
2.20	141	3.80	366	5.40	642	7.00	930
2.30	151	3.90	383	5.50	660	7.10	948
2.40	161	4.00	400	5.60	678	7.20	966
2.50	172	4.10	417	5.70	696	7.30	984

RATING TABLE FOR SHOAL CREEK NEAR BREESE, ILLINOIS, FROM NOVEMBER 5, 1909–DECEMBER 31, 1911—*Concluded*

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
7.40	1,002	10.60	1,620	13.80	2,296	17.00	3,570
7.50	1,020	10.70	1,640	13.90	2,318	17.10	3,690
7.60	1,038	10.80	1,660	14.00	2,340	17.20	3,810
7.70	1,056	10.90	1,680	14.10	2,362	17.30	3,930
7.80	1,074	11.00	1,700	14.20	2,384	17.40	4,050
7.90	1,092	11.10	1,720	14.30	2,406	17.50	4,170
8.00	1,110	11.20	1,740	14.40	2,428	17.60	4,290
8.10	1,129	11.30	1,760	14.50	2,450	17.70	4,410
8.20	1,148	11.40	1,780	14.60	2,474	17.80	4,540
8.30	1,167	11.50	1,800	14.70	2,498	17.90	4,670
8.40	1,186	11.60	1,820	14.80	2,522	18.00	4,800
8.50	1,205	11.70	1,840	14.90	2,546	18.10	4,930
8.60	1,224	11.80	1,860	15.00	2,570	18.20	5,060
8.70	1,243	11.90	1,880	15.10	2,596	18.30	5,190
8.80	1,262	12.00	1,900	15.20	2,622	18.40	5,320
8.90	1,281	12.10	1,922	15.30	2,650	18.50	5,450
9.00	1,300	12.20	1,944	15.40	2,678	18.60	5,580
9.10	1,320	12.30	1,966	15.50	2,708	18.70	5,710
9.20	1,340	12.40	1,988	15.60	2,740	18.80	5,840
9.30	1,360	12.50	2,010	15.70	2,774	18.90	5,970
9.40	1,380	12.60	2,032	15.80	2,808	19.00	6,100
9.50	1,400	12.70	2,054	15.90	2,844	19.10	6,230
9.60	1,420	12.80	2,076	16.00	2,880	19.20	6,360
9.70	1,440	12.90	2,098	16.10	2,920	19.30	6,490
9.80	1,460	13.00	2,120	16.20	2,960	19.40	6,620
9.90	1,480	13.10	2,142	16.30	3,000	19.50	6,750
10.00	1,500	13.20	2,164	16.40	3,050	19.60	6,880
10.10	1,520	13.30	2,186	16.50	3,100	19.70	7,010
10.20	1,540	13.40	2,208	16.60	3,160	19.80	7,140
10.30	1,560	13.50	2,230	16.70	3,240	19.90	7,270
10.40	1,580	13.60	2,252	16.80	3,340	20.00	7,400
10.50	1,600	13.70	2,274	16.90	3,450		

NOTE—The above table is not applicable for ice or obstructed channel conditions. It is based on fourteen discharge measurements made during 1909, 1910 and 1911, and is well defined between gage heights 1.6 and 4.0 feet and poorly defined between gage heights 4.1 and 17.5 feet. Above gage height 17.5 the curve is simply an extension.

DAILY DISCHARGE, IN SECOND-FEET, OF SHOAL CREEK NEAR BREESE, ILLINOIS, FOR 1909–11

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
1												183
2												141
3												172
4												141
5											98	172
6											90	228
7											98	267
8											183	180
9											1,800	130
10											1,020	120
11											283	267
12											221	678
13											2,240	2,100
14											2,710	2,450
15											2,600	1,800
16											2,810	1,290
17											3,050	840
18											2,920	696
19											2,680	606
20											1,200	500
21											606	400
22											840	300
23											1,440	240
24											1,720	220
25											1,090	200
26											502	170
27											315	130
28											221	100

DAILY DISCHARGE, IN SECOND-FEET, OF SHOAL CREEK NEAR BREESE, ILLINOIS, FOR 1909-11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	221	80
30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	195	70
31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70
1910												
1	70	195	4,290	98	141	786	114	90	106	161	98	114
2	70	151	5,970	98	136	588	110	74	110	132	90	98
3	70	141	6,100	98	1,070	235	132	82	106	110	94	86
4	70	597	4,930	94	2,190	606	114	86	2,190	195	94	70
5	70	553	3,160	94	1,920	2,270	553	82	2,500	642	90	60
6	60	366	1,780	251	1,580	2,450	1,050	82	2,790	3,000	94	50
7	60	221	1,020	597	966	1,000	894	82	3,340	3,510	90	42
8	60	183	624	208	1,110	485	349	82	3,510	5,060	94	42
9	70	151	400	151	1,620	349	123	86	2,810	5,900	94	42
10	70	141	332	132	966	400	132	82	1,940	4,800	90	42
11	70	136	221	106	588	267	208	82	1,130	1,580	90	42
12	100	132	178	106	434	183	123	82	283	930	86	42
13	2,430	128	151	106	1,130	151	132	82	151	434	90	42
14	2,880	123	146	110	1,990	123	141	82	141	366	90	42
15	3,450	146	136	183	966	267	114	78	136	315	86	40
16	3,690	208	132	1,150	606	624	1,480	78	132	267	90	40
17	4,670	349	128	2,210	221	822	2,230	82	114	132	86	40
18	3,930	267	123	2,520	183	151	2,860	132	110	123	90	40
19	3,160	161	123	2,240	166	136	2,960	267	106	118	90	40
20	3,200	141	118	957	146	1,060	1,760	588	98	114	86	40
21	3,000	161	114	434	132	1,300	714	366	98	114	90	40
22	1,940	195	118	251	267	519	299	642	102	114	86	40
23	948	366	118	183	2,340	132	267	1,740	102	114	90	40
24	606	349	114	151	2,810	114	251	3,100	132	114	90	40
25	383	214	114	161	3,000	106	123	3,450	434	110	86	40
26	315	267	110	156	3,690	110	114	2,740	1,380	110	90	40
27	349	1,070	110	172	4,600	221	102	1,090	2,030	106	86	40
28	417	3,050	106	195	4,170	768	74	417	1,900	106	94	81
29	383	.....	106	172	1,600	267	98	208	485	102	208	115
30	349	.....	102	146	1,150	123	94	132	172	98	128	588
31	235	.....	102	.....	2,010	.....	90	114	.....	94	.....	519
1911												
1	132	299	1,200	123	3,050	90	74	54	66	1,740	98	141
2	221	251	468	118	3,130	86	74	51	62	2,000	98	132
3	485	172	340	146	3,450	82	74	51	58	2,740	98	128
4	332	123	267	349	3,510	82	74	54	58	4,290	98	123
5	235	114	214	1,170	2,450	82	74	54	74	6,820	98	123
6	151	195	195	2,190	786	78	70	51	132	6,750	123	114
7	118	417	759	1,740	624	74	70	51	208	5,060	714	114
8	110	786	2,420	678	275	74	70	51	332	3,400	606	114
9	98	383	2,770	417	208	66	66	161	633	1,540	519	114
10	98	208	2,860	358	141	66	62	434	349	696	132	132
11	98	166	1,850	161	118	66	58	383	383	374	114	267
12	98	141	822	151	74	62	58	189	332	267	485	642
13	110	118	358	957	70	62	58	132	324	166	1,920	400
14	132	132	349	1,910	114	62	58	114	315	141	1,900	202
15	110	178	259	2,620	110	62	54	78	275	136	804	172
16	696	307	183	2,770	106	62	54	74	768	123	468	251
17	283	536	161	1,400	106	62	54	70	2,030	114	400	349
18	208	903	156	732	98	62	54	66	1,990	110	1,600	553
19	132	1,340	172	696	90	62	54	58	1,340	106	2,080	299
20	114	2,300	151	606	86	62	54	58	777	106	1,320	417
21	110	2,090	132	553	82	62	54	58	221	110	723	1,260
22	102	1,520	123	485	98	62	54	58	118	195	332	2,250
23	98	903	118	434	94	62	54	58	98	1,250	307	2,100
24	102	885	114	383	82	66	54	58	94	615	299	1,280
25	110	876	106	349	90	74	51	58	786	221	235	966
26	106	1,540	110	299	86	172	51	58	2,320	161	195	366
27	118	2,160	510	128	74	141	51	58	2,550	123	156	606
28	858	2,280	678	141	66	98	48	70	1,940	114	141	1,380
29	1,990	.....	299	442	66	86	48	82	1,070	114	123	588
30	1,010	.....	141	1,040	74	74	58	90	1,610	106	161	315
31	417	.....	132	.....	78	.....	54	86	.....	102	.....	434

NOTE—Discharges estimated because of ice for December 8 to 10, and 20 to 31, 1909, and for January 1 to 12, and December 4 to 29, 1910. The daily and monthly discharges published here differ from those previously published in U. S. Geological Survey Water Supply Papers Nos. 265 and 285; and in the report of the Internal Improvement Rating Commission of Illinois on surface water, 1908-10, because of revising curve on account of discharge measurements made in 1911.

MONTHLY DISCHARGE OF SHOAL CREEK NEAR BREESE, ILLINOIS, FOR 1909-11

[Drainage area, 760 square miles]

Month	Discharge in second-feet				Runoff—depth in inches on drainage area	Accuracy
	Maximum	Minimum	Mean	Per square mile		
1909						
November 5-30	.....	.....	1,200	1.58	1.53	.....
December	.....	.....	482	.634	.73	.....
1910						
January	4,670	.....	1,200	1.58	1.82	.....
February	3,050	123	363	0.477	0.50	.....
March	6,100	102	1,010	1.33	1.53	.....
April	2,520	94	451	0.593	0.66	.....
May	4,600	132	1,420	1.87	2.16	.....
June	2,450	106	554	0.729	0.81	.....
July	2,960	74	574	0.755	0.87	.....
August	3,450	74	528	0.694	0.80	.....
September	3,510	74	955	1.26	1.41	.....
October	5,900	98	938	1.23	1.42	.....
November	208	94	95.3	0.125	0.14	.....
December	588	86	85.1	0.112	0.13	.....
The year	6,100	.....	691	0.909	12.25	.....
1911						
January	1,990	98	290	.382	.44	A.
February	2,300	114	780	1.03	1.07	B.
March	2,860	106	594	.782	.90	A.
April	2,770	118	785	1.03	1.15	B.
May	3,510	66	629	.828	.95	B.
June	172	62	76.7	.101	.11	C.
July	74	48	59.4	.078	.09	C.
August	434	51	95.7	.126	.15	C.
September	2,550	58	710	.934	1.04	A.
October	6,820	102	1,280	1.68	1.94	B.
November	2,090	98	545	.717	.80	A.
December	2,250	114	527	.693	.80	A.
The year	6,820	51	529	.696	9.44	.....

SILVER CREEK NEAR LEBANON, ILLINOIS

Location.—At highway bridge at Wright's Crossing about 2 miles west of Lebanon, Ill., between the Baltimore and Ohio Southwestern and the East St. Louis and Suburban Railroad bridges across Silver Creek.

Records available.—March 3, 1908, to December 31, 1911.

Drainage area.—Three hundred and thirty-five square miles.

Gage.—Standard chain gage attached to bridge, datum unchanged. From March 3, 1908, to May 10, 1909, the gage was so situated that 2 feet was the lowest obtainable reading, and the gage reader noted that the stream was dry whenever the water surface was below 2 feet. Upon inquiry he stated that the stream was dry for only one week during 1908; therefore, where the gage heights have been marked "Dry" during this period this note inserted "Dry under gage, cannot obtain gage height of water surface." The position of the gage was changed on May 10, 1909, so as to obviate this difficulty.

Channel.—Probably permanent.

Discharge measurements.—Made from downstream side of bridge and small approach spans, and also, at high stages, from downstream side of three steel viaducts on road west of bridge.

Floods.—The maximum gage height since establishment of gage is 15.9 which occurred in May, 1908. No records of floods prior to the establishment of the station are available.

Winter flow.—Ice may affect the relation of gage height to discharge during portions of December, January, and February.

DISCHARGE MEASUREMENTS OF SILVER CREEK NEAR LEBANON, ILLINOIS, IN 1908-09

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1908		*Feet*	*Square feet*	*Feet*	*Second-feet*
March 21	R. J. Taylor	38	111	3.5	71
May 2	R. J. Taylor	41	130	4.25	107
July 9	R. J. Taylor	35	107	3.5	58
1909					
February 23	R. J. Taylor	378	1,610	12.56	1,760
March 14	W. M. O'Neill	46	185	5.34	180
March 25	W. M. O'Neill	50	254	6.66	314
May 8	H. J. Jackson	32	90	2.77	*34
May 10	H. J. Jackson	62	434	10.03	761
August 14	H. J. Jackson	24	70	2.24	6
November 4	H. J. Jackson	26	77	2.28	6
November 17	H. J. Jackson	360	1,320	12.04	1,124
November 20	H. J. Jackson	53	347	8.54	410
1910					
March 22	H. J. Jackson	31	100	3.00	42
May 27	C. T. Bailey	354	1,260	11.75	†1,000
May 28	C. T. Bailey	53	395	9.24	466
December 8	Bailey & Monk	32	102	3.01	‡8.9
1911					
March 14	P. S. Monk	38	125	3.80	84
October 21	Monk and Brown	34	96.2	2.77	32.3

* Measurement not made at regular section.
† Flow in three flood channels estimated to be fifty-three second-feet
‡ Ice present.

DAILY GAGE HEIGHT, IN FEET, OF SILVER CREEK NEAR LEBANON, ILLINOIS, FOR 1908-11

[F. P. Myers and E. C. Turner, observers]

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1				4.5	5.1	3.7	2.5	2.0				3.2
2				4.4	4.4	3.4	2.0					2.7
3				4.3		3.2	2.3	2.0				
4				4.0	4.2	5.4	2.5					
5					13.9	6.2						
6				4.0	15.5	6.0	2.5	3.9				
7				4.3	15.9		4.0	6.5				
8				5.0	15.5	5.2	5.4	5.8				
9				10.4	14.1	6.0	3.5					
10				11.0		7.8	2.7	5.0				
11				11.0	11.9	5.0	2.3	4.7				
12					9.8	3.6		4.2				
13				5.3	5.8	4.2	2.0	3.0				
14				4.2	7.2		2.0	2.0				
15				4.2	6.2	10.8	2.3	2.0				
16				4.8	4.9	7.5	3.0					
17				4.8		5.0	4.0					
18				4.8	6.6	3.2	5.2					
19					6.0	2.8						
20				4.5	5.3	2.6	2.7					
21			3.5	3.9	4.1		4.2					
22				3.5	11.0	3.5	5.1					
23			3.4	5.2	12.2	2.7	3.6					
24			3.3	11.1		4.5	3.6					
25			3.3	11.3	12.4	3.2	3.6					
26			3.2		11.8	2.5						
27			3.1	12.5	8.6	2.0	3.8					
28			3.5	12.1	11.0		7.5					
29				11.7	7.8	8.9	6.5					
30			3.7	8.8	7.0	2.8	3.5				3.4	
31			4.3				2.5					

DAILY GAGE HEIGHT, IN FEET, OF SILVER CREEK NEAR LEBANON, ILLINOIS, FOR 1908–11—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
1	.....	5.0	9.3	3.1	3.1	5.1	3.0	.....	0.6	1.0	2.2	3.1
2	.....	4.5	8.7	3.1	.....	7.6	2.3	2.1	.6	.9	2.2	3.15
3	.....	3.2	5.0	3.2	3.0	8.8	1.8	2.0	.6	.8	2.2	3.2
4	.....	4.0	3.6	.....	3.0	10.4	.....	2.0	.6	.7	2.2	3.15
5	.....	4.7	3.2	3.0	3.0	11.5	4.3	1.9	.6	.7	2.2	3.3
6	.....	7.5	2.7	2.8	2.9	.....	6.5	1.7	.6	.6	2.2	3.35
7	.....	.....	.....	7.1	2.9	11.7	11.2	1.7	.7	.6	2.65	3.5
8	.....	6.2	9.5	5.6	2.8	10.9	13.6	.....	.7	.6	5.15	3.45
9	.....	5.3	12.6	4.4	.....	10.4	14.0	1.6	.8	.6	8.6	3.45
10	.....	5.0	13.0	3.5	10.0	10.0	12.0	1.6	.9	.6	9.0	3.45
11	.....	4.7	12.8	.....	8.5	8.2	.....	1.5	.9	.6	5.75	3.0
12	.....	4.2	11.0	3.0	8.0	4.5	12.2	1.5	1.2	.55	5.0	5.4
13	.....	3.5	9.2	12.3	8.7	.....	12.6	1.5	1.9	.55	9.2	9.9
14	.....	.....	.....	13.5	10.4	3.7	8.5	4.5	1.9	.5	10.3	10.7
15	.....	10.4	7.8	13.0	11.0	3.4	6.2	2.0	1.7	.55	12.9	11.0
16	.....	10.7	6.7	12.5	.....	2.5	3.5	1.5	1.7	.6	12.6	10.4
17	.....	8.5	5.0	9.8	5.7	2.5	3.1	1.5	1.5	.7	12.1	6.9
18	.....	6.4	3.6	.....	4.1	2.5	.....	1.4	1.0	8.8	11.95	6.1
19	.....	11.2	.....	9.9	3.3	2.5	2.8	1.2	1.0	10.0	11.9	5.7
20	.....	12.1	.....	11.3	3.0	.....	2.5	1.0	1.0	9.9	10.35	4.5
21	2.7	.....	.....	12.8	3.0	2.4	2.3	1.0	1.2	10.0	5.4	3.8
22	4.0	12.2	.....	14.0	2.7	2.4	2.0	1.0	6.0	9.7	4.2	3.25
23	4.2	12.7	.....	13.8	.....	3.5	1.9	.9	5.1	6.1	9.0	3.0
24	.....	12.5	5.4	12.5	2.7	3.2	1.7	.8	3.5	5.0	7.4	3.0
25	4.2	12.5	8.7	.....	3.6	3.0	.....	.7	2.3	4.1	5.1	3.0
26	3.7	11.2	6.5	8.2	5.5	2.7	10.0	.7	1.7	3.2	4.2	3.0
27	2.8	10.0	5.8	4.3	5.0	.....	8.7	.7	1.5	2.8	3.7	3.0
28	3.6	.....	.....	3.8	4.3	2.5	5.1	.7	1.0	2.5	3.5	3.0
29	4.5	.....	3.7	3.6	3.0	4.1	2.9	.7	1.0	2.3	3.3	3.0
30	8.2	.....	3.5	3.3	.....	3.5	2.5	.6	.9	2.3	3.2	3.0
31	.....	.....	3.3	.....	3.5	.....	2.3	.6	.....	2.3	.....	2.9
1910												
1	3.1	3.6	14.6	2.7	3.0	3.8	2.2	2.5	2.25	2.5	3.5	3.25
2	5.4	3.75	13.8	2.6	2.9	3.0	2.2	2.0	2.05	2.5	3.4	3.15
3	5.4	4.0	13.0	2.6	5.0	2.8	4.1	1.9	.....	2.45	3.4	3.1
4	6.2	5.8	12.3	2.7	8.7	2.8	3.2	1.8	.....	3.1	3.4	3.15
5	7.0	6.5	11.6	3.6	8.2	9.5	2.7	1.8	.....	3.1	3.25	3.1
6	8.0	4.7	8.6	4.9	4.5	11.0	2.45	1.6	13.4	11.55	3.45	3.1
7	7.9	3.9	5.6	4.8	5.1	12.0	2.2	2.4	13.2	12.5	3.4	3.1
8	7.7	3.7	4.7	3.8	8.6	11.5	2.1	2.2	12.6	14.4	3.5	2.95
9	6.9	3.6	4.2	3.1	8.1	8.1	2.2	2.25	12.2	13.3	3.45	3.0
10	4.7	3.6	3.9	2.9	5.4	9.5	4.75	2.1	9.7	12.4	3.5	2.85
11	4.9	3.55	3.7	2.7	4.2	6.4	3.2	1.8	4.7	10.75	3.45	2.85
12	7.1	3.5	3.6	2.9	5.5	4.8	6.7	1.65	3.5	5.2	3.05	2.9
13	11.2	3.5	3.5	2.8	6.0	3.4	5.6	1.5	3.0	3.85	3.1	2.85
14	13.9	3.5	3.4	2.7	5.5	3.05	3.4	1.5	2.9	3.55	3.05	.....
15	14.3	4.1	3.25	3.6	4.7	3.1	2.55	1.45	2.6	3.35	3.1	.....
16	13.2	5.1	3.2	9.6	3.2	4.3	3.65	1.7	2.7	3.2	3.05	.....
17	12.8	7.6	3.2	10.3	3.1	4.65	8.9	1.7	2.45	3.2	3.1	.....
18	12.2	6.1	3.2	10.6	3.2	3.2	10.4	1.7	2.25	3.15	3.1	.....
19	11.9	5.3	3.2	8.1	3.1	2.9	9.6	1.9	2.4	3.2	3.1	.....
20	12.3	4.9	3.2	5.0	2.9	2.7	4.5	2.2	2.4	3.2	3.15	3.0
21	11.9	4.4	3.15	4.0	2.7	2.9	2.9	2.0	2.4	3.15	3.15	.....
22	11.5	4.5	3.1	3.5	2.6	3.9	2.35	1.7	2.3	3.35	3.15	.....
23	8.7	4.9	3.0	3.3	11.6	2.9	2.2	11.9	2.4	3.25	3.15	.....
24	5.8	4.9	3.0	3.2	13.2	2.5	2.7	11.7	2.65	3.3	3.15	.....
25	4.5	4.5	3.0	3.1	13.8	2.35	2.25	13.7	2.7	3.3	3.2	.....
26	4.5	4.5	3.0	3.1	12.7	2.5	2.85	13.0	2.85	3.25	3.2	.....
27	4.5	11.0	2.9	3.5	12.0	2.6	3.45	11.9	5.0	3.3	3.2	2.9
28	4.5	11.9	2.9	3.4	9.3	4.7	2.6	5.4	4.9	3.25	3.3	3.35
29	4.6	.....	2.9	3.4	7.4	3.25	2.3	3.55	3.6	3.3	3.6	3.65
30	4.3	.....	2.8	3.2	5.1	2.55	2.9	2.7	3.2	3.4	3.5	4.0
31	4.0	.....	2.8	.....	4.6	.....	2.6	2.5	.....	3.45	.....	3.75
1911												
1	.....	3.6	6.2	3.25	14.8	.....	1.95	.85	1.4	10.8	2.6	4.05
2	.....	3.4	4.8	3.2	14.5	.....	1.8	.8	1.4	10.0	2.7	3.5
3	.....	3.3	4.3	3.2	13.1	.....	1.7	.7	1.4	10.3	2.6	3.3
4	3.05	3.2	4.0	5.0	12.3	.....	1.6	1.6	1.3	11.1	2.6	3.2
5	.....	3.1	4.0	9.3	11.2	2.1	1.55	1.8	4.0	12.9	2.6	3.1
6	.....	5.6	4.0	10.3	6.1	2.1	1.4	1.7	6.1	12.45	3.35	3.0
7	.....	4.9	4.0	9.0	4.3	2.1	1.3	1.5	8.3	11.0	4.45	2.95
8	.....	4.9	10.05	5.1	3.6	2.0	1.2	1.55	5.4	9.6	6.0	2.95
9	.....	4.5	10.8	3.8	3.4	1.9	1.1	2.5	5.4	7.0	4.6	10.1
10	.....	4.0	11.9	3.4	3.3	1.85	1.05	2.7	4.4	3.95	3.6	.....
11	3.0	3.6	11.1	3.3	3.2	1.8	1.0	9.5	4.0	3.3	3.0	.....
12	3.0	3.2	9.9	3.4	3.1	1.7	1.2	8.8	6.95	2.9	9.7	.....
13	3.0	3.25	5.3	8.3	3.0	1.6	1.5	4.4	4.1	2.9	10.0	.....

DAILY GAGE HEIGHT, IN FEET, OF SILVER CREEK NEAR LEBANON, ILLINOIS, FOR 1908-11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1911												
14	3.0	3.3	3.8	10.7	2.9	1.6	1.9	2.8	2.6	2.6	10.4	.....
15	3.0	3.3	3.5	11.0	2.8	1.65	1.8	2.2	1.95	2.6	7.9	.....
16	.....	3.35	3.3	12.2	2.7	1.6	1.8	1.9	7.4	2.5	4.9	.....
17	.....	6.2	3.25	11.95	2.6	1.6	1.7	1.6	9.4	2.5	4.3	.....
18	3.0	5.3	3.9	10.0	2.7	1.55	1.5	1.5	10.2	2.4	6.1	6.05
19	3.0	7.6	4.4	6.6	2.6	1.5	1.2	1.65	10.6	2.3	9.7	4.1
20	3.0	9.0	3.6	8.6	2.5	1.5	1.2	6.7	11.2	2.4	8.3	7.8
21	3.0	8.7	3.4	5.9	5.9	1.5	1.15	3.0	10.8	2.55	4.9	10.1
22	3.0	7.4	3.25	4.2	4.1	1.45	1.1	2.25	7.6	3.6	4.3	8.7
23	3.0	5.5	3.2	3.6	3.9	1.4	1.1	1.8	3.1	8.2	4.4	10.3
24	3.0	5.45	3.1	3.3	2.6	1.35	.95	1.8	2.6	6.8	4.2	4.9
25	3.0	5.9	3.05	3.1	2.5	5.6	1.0	1.5	2.1	4.0	4.1	4.7
26	3.0	8.9	3.1	3.0	2.45	2.9	.95	1.5	10.7	3.3	4.0	4.2
27	3.0	10.25	5.6	2.9	2.4	2.2	.9	2.4	11.1	3.0	3.4	4.8
28	5.6	9.8	5.3	3.35	2.3	2.45	.85	2.3	13.2	2.8	4.05	7.4
29	7.1	.....	4.3	3.9	2.3	2.3	.8	2.0	13.05	2.8	4.6	5.0
30	6.15	.....	3.6	13.3	.....	2.2	.9	1.7	12.3	2.6	4.9	3.8
31	4.0	.....	3.3	.....	.....	.....	.85	1.6	.....	2.7	.....	.....

NOTE—Ice conditions December 8–31, 1909; January 1–10, and December 8–28, 1910, and January 1–11, and 16–18, 1911. Gage read to top of ice December 17–31, 1909, and January 1–10, 1910. Gage read to water surface in hole in ice January 4, 1911. Gage was not over main channel previous to May 10, 1909, so that 2.0 was lowest obtainable reading. Stages of less than 2.0 feet occurred August 4 and 5, August 16–November 29, and December 3–31, 1908, and January 1–20, 1909. There was no flow for about a week in 1908. Gage chain stolen May 31–June 4, and December 10–17, 1911.

RATING TABLE FOR SILVER CREEK NEAR LEBANON, ILLINOIS, FROM MARCH 3, 1908–DECEMBER 31, 1911

Gage height	Discharge	Gage height	Discharge	Gage height	Dis. charge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
0.60	.1	4.50	122	8.40	469	12.30	1,490
0.70	.2	4.60	129	8.50	480	12.40	1,580
0.80	.4	4.70	136	8.60	492	12.50	1,680
0.90	.7	4.80	143	8.70	504	12.60	1,780
1.00	1.0	4.90	150	8.80	516	12.70	1,880
1.10	1.5	5.00	157	8.90	528	12.80	1,980
1.20	2.0	5.10	164	9.00	540	12.90	2,080
1.30	2.5	5.20	171	9.10	552	13.00	2,180
1.40	3.0	5.30	179	9.20	564	13.10	2,280
1.50	4	5.40	187	9.30	576	13.20	2,380
1.60	5	5.50	195	9.40	588	13.30	2,480
1.70	6	5.60	203	9.50	600	13.40	2,580
1.80	7	5.70	211	9.60	613	13.50	2,680
1.90	8	5.80	219	9.70	626	13.60	2,780
2.00	10	5.90	227	9.80	639	13.70	2,880
2.10	12	6.00	235	9.90	652	13.80	2,980
2.20	14	6.10	244	10.00	665	13.90	3,085
2.30	17	6.20	253	10.10	679	14.00	3,190
2.40	20	6.30	262	10.20	695	14.10	3,295
2.50	23	6.40	271	10.30	712	14.20	3,400
2.60	26	6.50	280	10.40	730	14.30	3,505
2.70	29	6.60	289	10.50	750	14.40	3,610
2.80	33	6.70	298	10.60	770	14.50	3,715
2.90	37	6.80	307	10.70	792	14.60	3,820
3.00	41	6.90	316	10.80	814	14.70	3,925
3.10	45	7.00	325	10.90	836	14.80	4,030
3.20	49	7.10	335	11.00	860	14.90	4,040
3.30	54	7.20	345	11.10	885	15.00	4,250
3.40	59	7.30	355	11.20	915	15.10	4,360
3.50	64	7.40	365	11.30	945	15.20	4,470
3.60	69	7.50	375	11.40	975	15.30	4,580
3.70	74	7.60	385	11.50	1,010	15.40	4,690
3.80	80	7.70	395	11.60	1,050	15.50	4,800
3.90	86	7.80	405	11.70	1,090	15.60	4,910
4.00	92	7.90	415	11.80	1,140	15.70	5,020
4.10	98	8.00	425	11.90	1,190	15.80	5,130
4.20	104	8.10	436	12.00	1,240	15.90	5,240
4.30	110	8.20	447	12.10	1,320	16.00	5,350
4.40	116	8.30	458	12.20	1,400		

NOTE—The above table is not applicable for ice or obstructed channel conditions. It is based on twenty-two discharge measurements made during 1908–11, and is well defined between gage heights 2.7 and 6.8 feet and is fairly well defined between gage heights 6.9 feet and 12.6 feet.

DAILY DISCHARGE, IN SECOND-FEET, OF SILVER CREEK NEAR LEBANON, ILLINOIS, FOR 1908–11

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1	.....	.....	.....	122	164	74	23	10	.....	.....	.....	49
2	.....	.....	.....	116	116	59	10	10	.....	.....	.....	29
3	.....	.....	.....	110	110	49	17	10	.....	.....	.....	.....
4	.....	.....	.....	92	104	187	23	8	.....	.....	.....	.....
5	.....	.....	.....	92	3,080	253	23	8	.....	.....	.....	.....
6	.....	.....	.....	92	4,800	235	23	86	.....	.....	.....	.....
7	.....	.....	.....	110	5,240	203	92	280	.....	.....	.....	.....
8	.....	.....	.....	157	4,800	171	187	219	.....	.....	.....	.....
9	.....	.....	.....	730	3,300	235	64	188	.....	.....	.....	.....
10	.....	.....	.....	860	2,240	405	29	157	.....	.....	.....	.....
11	.....	.....	.....	860	1,190	157	17	136	.....	.....	.....	.....
12	.....	.....	.....	520	639	69	14	104	.....	.....	.....	.....
13	.....	.....	.....	179	219	104	10	41	.....	.....	.....	.....
14	.....	.....	.....	104	345	409	10	10	.....	.....	.....	.....
15	.....	.....	.....	104	253	814	17	10	.....	.....	.....	.....
16	.....	.....	.....	143	150	375	41	.....	.....	.....	.....	.....
17	.....	.....	.....	143	220	157	92	.....	.....	.....	.....	.....
18	.....	.....	.....	143	289	49	171	.....	.....	.....	.....	.....
19	.....	.....	.....	133	235	33	100	.....	.....	.....	.....	.....
20	.....	.....	.....	122	179	26	29	.....	.....	.....	.....	.....
21	.....	.....	64	86	98	45	104	.....	.....	.....	.....	.....
22	.....	.....	62	64	880	64	164	.....	.....	.....	.....	.....
23	.....	.....	59	171	1,400	29	69	.....	.....	.....	.....	.....
24	.....	.....	54	885	1,490	122	69	.....	.....	.....	.....	.....
25	.....	.....	54	945	1,580	49	69	.....	.....	.....	.....	.....
26	.....	.....	49	1,310	1,140	23	74	.....	.....	.....	.....	.....
27	.....	.....	45	1,680	492	10	80	.....	.....	.....	.....	.....
28	.....	.....	64	1,320	860	269	375	.....	.....	.....	.....	.....
29	.....	.....	69	1,090	405	528	280	.....	.....	.....	.....	.....
30	.....	.....	74	516	325	33	64	.....	.....	.....	59	.....
31	.....	.....	110	.....	200	.....	23	.....	.....	.....	.....	.....
1909												
1	.....	157	576	45	45	164	41	14	0.1	1.0	14	45
2	.....	122	504	45	43	385	17	12	.1	.7	14	47
3	.....	49	157	49	41	516	7	10	.1	.4	14	49
4	.....	92	69	45	41	730	58	10	.1	.2	14	47
5	.....	136	49	41	41	1,010	110	8	.1	.2	14	54
6	.....	375	29	33	37	1,050	280	6	.1	.1	14	56
7	.....	314	314	335	37	1,090	915	6	.2	.1	28	64
8	.....	253	600	203	33	836	2,780	5	.2	.1	168	60
9	.....	179	1,780	116	349	730	3,190	5	.4	.1	492	50
10	.....	157	2,180	64	665	665	1,240	5	.7	.1	540	40
11	.....	136	1,980	52	480	447	1,320	4	.7	.1	215	35
12	.....	104	860	41	425	122	1,400	4	2.0	.65	157	187
13	.....	64	564	1,490	504	146	1,780	4	8	.05	564	652
14	.....	397	484	2,680	730	74	480	122	8	.0	712	792
15	.....	730	405	2,180	860	59	253	10	6	.05	2,080	860
16	.....	792	298	1,680	536	23	64	4	6	.1	1,780	730
17	.....	480	157	639	211	23	45	4	4	.2	1,320	250
18	.....	271	69	646	98	23	39	3	1.0	516	1,220	200
19	.....	915	89	652	54	23	33	2.0	1.0	665	1,190	150
20	.....	1,320	108	945	41	22	23	1.0	1.0	652	721	100
21	29	1,360	128	1,980	41	20	17	1.0	2.0	665	187	80
22	92	1,400	148	3,190	29	20	10	1.0	235	626	104	60
23	104	1,880	167	2,980	29	64	8	.7	164	244	540	40
24	104	1,680	187	1,680	29	49	6	.4	64	157	365	30
25	104	1,680	504	1,060	69	41	336	.2	17	98	164	20
26	74	915	280	447	195	29	665	.2	6	49	104	20
27	33	665	219	110	157	26	504	.2	4	33	74	20
28	69	620	146	80	110	23	164	.2	1.0	23	64	20
29	122	.....	74	69	41	98	37	.2	1.0	17	54	15
30	447	.....	64	54	52	64	23	.1	.7	17	49	15
31	302	.....	54	.....	64	.....	17	.1	.....	17	.....	15
1910												
1	20	69	3,820	29	41	80	14	23	16	23	64	52
2	100	77	2,980	26	37	41	14	10	11	23	59	47
3	100	92	2,180	26	157	33	98	8	11	22	59	45
4	150	219	1,490	29	504	33	49	7	2,000	45	59	35
5	200	280	1,050	69	447	600	29	7	2,300	45	56	25
6	300	136	492	150	122	860	22	5	2,580	1,030	62	15
7	300	86	203	143	164	1,240	14	20	2,380	1,680	59	11
8	250	74	136	80	492	1,010	12	14	1,780	3,610	64	9
9	200	69	104	45	436	436	14	16	1,400	2,480	62	9
10	120	69	86	37	187	600	140	12	626	1,580	64	9
11	150	66	74	29	104	271	49	7	136	803	62	9
12	335	64	69	37	195	143	298	5	64	171	43	9
13	915	64	64	33	235	59	203	4	41	83	45	9

DAILY DISCHARGE, IN SECOND-FEET, OF SILVER CREEK NEAR LEBANON, ILLINOIS, FOR 1908-11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1910												
14	3,080	64	59	29	195	43	59	4	37	66	43	9
15	3,500	98	52	69	136	45	24	3	26	56	45	9
16	2,380	164	49	613	49	110	72	6	29	49	43	9
17	1,980	385	49	712	45	132	528	6	22	49	45	9
18	1,400	244	49	770	49	49	730	6	16	47	45	9
19	1,190	179	49	436	45	37	613	8	20	49	45	9
20	1,490	150	49	157	37	29	122	14	20	49	47	9
21	1,190	116	47	92	29	37	37	10	20	47	47	9
22	1,010	122	45	64	26	86	18	6	17	56	47	9
23	504	150	41	54	1,050	37	14	1,190	20	52	47	9
24	219	150	41	49	2,380	23	29	1,090	28	54	47	9
25	122	122	41	45	2,980	18	16	2,880	29	54	49	9
26	122	122	41	45	1,880	23	35	2,180	35	52	49	9
27	122	860	37	64	1,240	26	62	1,190	157	54	49	9
28	122	1,190	37	59	576	136	26	187	150	52	54	25
29	129	.....	37	59	365	52	17	66	69	54	69	74
30	110	.....	33	49	164	24	37	29	49	59	64	92
31	92	.....	33	.....	129	.....	26	23	.....	62	.....	77
1911												
1	.....	69	253	52	4,030	15	9	.6	3	814	26	95
2	.....	59	143	49	3,720	14	7	.4	3	665	29	64
3	.....	54	110	49	2,280	13	6	.2	3	712	26	54
4	.....	49	92	157	1,490	12	5	5	2.5	885	26	49
5	.....	45	92	576	915	12	4.5	7	3	2,080	26	45
6	.....	203	92	712	244	12	3	6	244	1,630	56	41
7	.....	150	92	540	110	12	2.5	4	458	860	119	39
8	.....	150	672	164	69	10	2	4.5	187	613	235	39
9	.....	122	814	80	59	8	1.5	23	187	325	129	679
10	.....	92	1,190	59	54	7.5	1.2	29	116	89	69	.....
11	.....	69	885	54	49	7	1	600	92	54	41	.....
12	41	49	652	59	45	6	2	516	320	37	626	.....
13	41	52	179	458	41	5	4	116	98	37	665	.....
14	41	54	80	792	37	5	8	33	26	26	730	.....
15	41	54	64	860	33	5.5	7	14	9	26	415	.....
16	200	56	54	1,400	29	5	7	8	365	23	150	.....
17	150	253	52	1,220	26	5	6	5	588	23	110	.....
18	41	179	86	665	29	4.5	4	4	695	20	244	240
19	41	385	116	282	26	4	2	5.5	770	17	626	98
20	41	540	69	492	23	4	2	298	915	20	458	405
21	41	504	59	227	227	4	1.8	41	814	24	150	679
22	41	365	52	104	98	3.5	1.5	16	385	69	110	504
23	41	195	49	69	86	3	1.5	7	45	447	116	712
24	41	191	45	54	26	2.8	.8	7	26	307	104	150
25	41	227	43	45	23	203	1	4	12	92	98	136
26	41	528	45	41	22	37	.8	4	792	54	92	104
27	41	704	203	37	20	14	.7	20	885	41	59	143
28	203	639	179	56	17	22	.6	17	2,380	33	95	365
29	335	.....	110	86	17	17	.4	10	2,230	33	129	157
30	248	.....	69	2,480	17	14	.7	6	1,490	26	150	80
31	92	.....	54	.....	16	.....	.6	5	.....	29	.....	140

NOTE—Daily discharge computed from a rating table well defined between 29 and 307 second-feet, and fairly well defined between 316 and 1,780 second-feet. Discharges estimated because of ice December 8-11, 17-31, 1909, January 1-10, and December 3-28, 1910. For period August 16, 1908-January 20, 1909, see note under daily gage heights. Discharges January 1-11, 16, 17, May 30-June 4 December 10-17, and December 31, 1911, estimated by comparison with discharge of Shoal Creek near Breese, Illinois, and Cahokia Creek near Poag, Illinois. Mean discharge January 1-11, 1911, estimated about 54 second-feet, varying from about 35 to 90 second-feet. Mean discharge December 10-17, 1911, estimated about 327 second-feet, varying from about 100 to 600 second-feet.

MONTHLY DISCHARGE OF SILVER CREEK NEAR LEBANON, ILLINOIS, FOR 1908–11

[Drainage area, 335 square miles.

Month	Discharge in second-feet				Runoff—depth in inches on drainage area	Accuracy
	Maximum	Minimum	Mean	Per square mile		
1908						
March 21-31	110	45	64.0	0.191	0.08	B.
April	1,680	64	433	1.29	1.44	B.
May	5,240	98	1,180	3.52	4.06	C.
June	814	10	175	.522	.58	B.
July	375	10	76.2	.227	.26	B.
August 1-15*	280	.....	85.1	.254	.14	C.
1909						
January 21-31*	447	29	135	.403	.16	C.
February	1,880	49	616	1.84	1.92	B.
March	2,180	29	427	1.27	1.46	B.
April	3,190	33	788	2.35	2.62	B.
May	860	29	196	.585	.67	B.
June	1,090	20	286	.854	.95	B.
July	3,190	6	512	1.53	1.76	B.
August	122	.1	7.85	.023	.03	C.
September	235	.1	17.8	.053	.06	C.
October	665	.0	122	.364	.42	C.
November	2,080	14	433	1.29	1.44	B.
December	860	.....	155	.463	.53	C.
1910						
January	3,500	.....	707	0.211	2.43	C.
February	1,190	64	196	.585	.61	B.
March	3,820	33	438	1.31	1.51	B.
April	770	26	137	.409	.46	B.
May	2,980	26	468	1.40	1.61	B.
June	1,240	18	210	.627	.70	B.
July	730	12	110	.328	.38	B.
August	2,880	3.5	291	.869	1.00	B.
September	2,580	11	470	1.41	1.57	B.
October	3,610	22	40.5	1.21	1.40	B.
November	69	43	53.1	.158	.18	B.
December	.....	.....	21.9	.065	.07	C.
The year	3,820	3.5	294	.878	11.92	
1911						
January	335	.....	77.2	.230	.27	D.
February	704	45	216	.645	.67	A.
March	1,190	43	216	.645	.74	A.
April	2,480	37	398	1.19	1.33	B.
May*	4,030	16	448	1.34	1.54	C.
June*	203	2.8	16.2	.048	.05	D.
July	9	.4	3.07	.0092	.01	D.
August	600	.2	58.6	.175	.20	C.
September	2,380	2.5	471	1.41	1.57	C.
October	2,080	17	326	.973	1.12	C.
November	730	26	197	.588	.66	A.
December	712	39	246	.734	.85	C.
The year	4,030	.2	222	.663	9.01	

* See note under daily gage heights.

BIG MUDDY RIVER DRAINAGE BASIN

DESCRIPTION

The drainage basin of Big Muddy River lies in southern Illinois. The river rises in the northwestern part of Jefferson County, flows southward to the town of Zeigler, in Franklin County, thence westward to Murphysboro, in Jackson County, and then southward to its junction with the Mississippi about 40 miles above Cairo, Ill. Below

Zeigler the river is extremely crooked. The total drainage area is about 2,230 square miles. The principal tributaries are Beaucoup Creek, Little Muddy River, Caseys Creek, and Middle Fork Creek—all small streams of little importance.

The drainage basin is elliptical in shape, with a major axis about 70 miles long and a minor axis about 50 miles long. The country is level or undulating. The soil is known as "mulatto soil"—a yellowish-brown clay. Winter wheat is the staple crop. The southeastern part is underlain with valuable coal veins and coal mining is carried on quite extensively.

The slope of the river is small. Its sources are about 710 feet, and its mouth is about 310 feet, above sea level. The banks and bed of the stream are soft and insecure.

The area is timberless except for occasional groves and the growth along the banks of the streams.

The mean annual rainfall is about 42 inches. The winters are mild. Ice does not form very thick, and, as a rule, the snowfall is light and does not last long.

Storage possibilities have not been investigated, but owing to the growing demand for water in this section they should receive careful attention.

The basin offers no opportunities for power development. Like the other rivers in central and southern Illinois, this stream is subject to high floods and very low water. In some localities the high water overflows the land on each bank for 2 or 3 miles; some sections resemble a lake during floods. Backwater from the Mississippi frequently extends to Murphysboro, said to be 60 miles distant following the river, and floods reach the height of 30 feet above low water. It is possible that a canal will be constructed from the Mississippi to the coal fields that lie along the Big Muddy. It is thought that only one lock would be necessary. Canal construction would probably be very simple, as the country is low and the material excavated very soft.

BIG MUDDY RIVER NEAR CAMBON, ILLINOIS

Location.—At the Chicago, Burlington and Quincy Railroad bridge about 1 mile north of Cambon Station and about 1½ miles east of Plumfield, Ill., in Sec. 17, T. 7 S., R. 2 E., about ¼ mile below the mouth of the Middle Fork.

Records available.—June 16, 1908, to December 31, 1911.

Drainage area.—Seven hundred and thirty-five square miles.

Gage.—Standard chain gage attached to bridge; datum has remained unchanged since establishment.

Channel.—Probably permanent.

Discharge measurements.—Made from downstream side of bridge and wooden approach trestles.

Floods.—Maximum gage height since establishment of the gage is 25.3 feet, which occurred in May, 1911. No records of floods prior to establishment of station are available.

Point of zero flow.—A determination by leveling Octobeer 25, 1911, indicates that there would be no flow past the station if the stream were to fall to about 1.4 feet by the gage datum.

Winter flow.—Ice may affect the relation between gage height and discharge during portions of December, January, and February.

DISCHARGE MEASUREMENTS OF BIG MUDDY RIVER NEAR CAMBON, ILLINOIS, IN 1908–11

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet	*Sq.-ft.*	*Feet*	*Sec.-ft.*
1908					
June 15	R. J. Taylor	41.5	53	2.7	19
1909					
February 18	R. J. Taylor	589	3,230	16.58	3,040
March 12	W. M. O'Neill	641	8,250	24.54	10,300
March 27	W. M. O'Neill	102	455	8.28	542
May 12	H. J. Jackson	95	455	8.27	548
November 13	H. J. Jackson	26	12	1.79	1
1910					
May 23	C. T. Bailey	75	274	6.52	311
May 24	C. T. Bailey	91	358	7.56	457
May 25	C. T. Bailey	100	509	9.00	782
June 4	C. T. Bailey	41	31.4	2.30	19.3
December 12	Bailey & Monk	39	27.3	2.21	*14.4
1911					
March 10	P. S. Monk	214	808	10.25	932
October 25	Monk and Brown	49	34.8	2.42	24.3

* Ice present.

DAILY GAGE HEIGHT, IN FEET, OF BIG MUDDY RIVER NEAR CAMBON, ILLINOIS, FOR 1908–11

[W. O. Bourland and Robert Tackitt, observers]

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1							1.6	3.8	1.5	1.3	1.1	1.5
2							1.6	3.0	1.5	1.3	1.1	1.5
3							1.6	2.7	1.5	1.3	1.1	1.5
4							1.6	2.4	1.5	1.3	1.1	1.5
5							1.6	2.2	1.5	1.3	1.1	1.5
6							1.6	2.5	1.5	1.3	1.1	1.5
7							1.6	3.5	1.5	1.3	1.1	1.5
8							1.6	3.2	1.5	1.3	1.1	1.5
9							1.6	3.0	1.5	1.3	1.1	1.5
10							1.6	3.8	1.5	1.3	1.3	1.5
11							1.6	3.5	1.5	1.3	1.3	1.5
12							1.6	3.5	1.4	1.3	1.3	1.5
13							1.6	2.7	1.4	1.3	1.3	1.5
14							1.6	2.5	1.4	1.3	1.3	1.5
15							1.6	2.3	1.4	1.3	1.3	1.5
16						2.5	1.6	2.1	1.4	1.3	1.3	1.5
17						2.3	1.6	1.9	1.4	1.3	1.3	1.5
18						2.2	1.6	1.9	1.4	1.3	1.3	1.5
19						2.1	1.6	1.8	1.4	1.3	1.3	1.5
20						2.0	1.6	1.8	1.4	1.2	1.3	1.5
21						2.0	1.6	1.7	1.4	1.2	1.3	1.5
22						1.9	1.6	1.7	1.4	1.2	1.3	1.5
23						1.9	4.1	1.6	1.4	1.2	1.3	1.5
24						1.8	2.8	1.6	1.4	1.2	1.5	1.5
25						1.8	2.1	1.6	1.4	1.2	1.5	1.5
26						1.7	1.9	1.6	1.4	1.2	1.5	1.5
27						1.7	1.8	1.6	1.4	1.2	1.5	1.5
28						1.6	1.7	1.6	1.4	1.1	1.5	1.5
29						1.6	1.6	1.5	1.4	1.1	1.5	1.5
30						1.6	4.7	1.5	1.4	1.1	1.5	1.5
31							4.9	1.5		1.1		1.5
1909												
1	1.5	2.6	16.8	3.65	9.95	4.9	6.3	4.9	1.6	2.4	1.8	3.0
2	1.5	2.6	14.8	3.35	10.45	4.3	4.5	10.0	1.6	2.3	1.75	2.8
3	1.5	2.6	12.9	3.25	7.65	3.8	3.65	10.2	1.6	2.2	1.75	2.7

DAILY GAGE HEIGHTS, IN FEET, OF BIG MUDDY RIVER NEAR CAMBON, ILLINOIS, FOR 1908–11—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct	Nov.	Dec.
1909												
4	1.4	2.6	10.2	3.25	5.2	3.75	3.0	5.4	1.6	2.15	1.75	2.6
5	1.4	3.7	6.8	3.25	4.0	4.85	2.7	5.0	1.55	2.15	1.75	2.55
6	1.4	3.9	5.5	6.2	3.9	10.65	2.55	3.4	1.55	2.1	1.75	2.55
7	1.4	4.1	4.7	10.3	5.35	11.3	2.4	3.1	1.55	1.9	1.75	2.55
8	1.4	5.2	4.1	11.6	4.7	10.6	5.7	5.1	1.7	1.9	1.8	2.5
9	1.4	5.8	16.4	11.2	4.5	9.65	6.1	6.9	1.7	1.9	1.85	2.5
10	1.4	5.9	21.2	10.3	7.3	6.5	5.65	4.3	1.7	1.9	1.85	2.5
11	1.4	6.0	24.3	9.9	8.5	4.2	8.45	3.4	1.65	1.85	1.85	3.2
12	1.4	6.1	24.7	7.1	7.4	3.5	13.95	3.3	1.65	1.85	1.85	7.3
13	1.4	6.7	23.8	13.9	6.7	5.3	15.4	3.3	1.65	1.85	1.85	10.4
14	1.4	11.7	21.9	14.95	5.05	9.2	18.95	3.15	1.65	1.8	1.9	12.5
15	1.4	14.2	20.6	16.45	4.2	10.6	20.55	3.05	1.65	1.8	3.5	13.25
16	1.4	14.5	18.75	17.45	4.2	11.2	20.4	3.65	2.2	1.75	4.8	13.55
17	1.5	15.9	16.9	18.4	4.2	10.1	19.75	2.4	2.1	1.7	4.5	13.65
18	1.5	16.0	12.7	17.1	4.1	6.85	18.7	2.3	2.05	1.7	6.1	13.4
19	1.5	16.4	10.5	16.3	3.6	3.8	16.7	2.2	2.0	1.7	6.8	9.5
20	1.5	16.2	9.7	17.4	3.2	3.2	12.1	2.0	2.0	1.7	6.1	6.2
21	1.5	15.2	8.2	18.95	2.9	2.9	8.25	1.8	1.95	1.7	5.6	5.4
22	1.7	15.3	7.75	20.05	2.7	2.8	5.15	1.75	2.45	1.7	5.1	4.55
23	2.5	16.4	6.45	20.15	2.5	2.65	3.9	1.75	5.6	1.7	6.7	3.75
24	4.1	18.7	4.9	20.25	2.5	2.45	3.05	1.7	8.65	1.7	7.0	3.2
25	3.9	20.5	6.85	20.2	2.45	4.8	2.7	1.7	7.95	1.75	8.7	2.9
26	3.6	21.0	8.75	18.25	3.4	7.55	2.5	1.7	5.6	1.8	7.6	2.8
27	3.3	20.5	7.9	17.05	5.5	8.2	3.4	1.7	4.2	1.8	5.5	2.7
28	3.2	18.9	6.2	14.5	8.5	6.95	3.6	1.7	3.4	1.8	5.5	2.6
29	3.2	.....	5.7	8.9	9.95	7.35	3.2	1.7	3.0	1.8	4.8	2.55
30	3.1	.....	4.5	9.85	8.75	6.5	2.9	1.65	2.7	1.8	3.35	2.5
31	2.6	.....	4.0	.....	6.6	.....	2.7	1.65	.....	1.8	.....	2.45
1910												
1	2.45	4.2	18.95	2.25	5.15	2.8	4.1	3.2	3.55	.....	.....	.....
2	2.7	3.9	21.35	2.25	5.35	2.3	3.1	3.2	3.25	.....	.....	.....
3	3.2	3.75	22.35	2.15	3.9	2.3	3.2	2.85	3.9	.....	.....	.....
4	4.0	3.7	22.15	2.2	5.45	2.25	4.2	2.6	.....	.....	.....	.....
5	4.5	3.65	21.25	2.25	5.85	2.25	4.7	2.35	.....	.....	.....	.....
6	6.25	4.0	19.9	2.3	6.55	2.3	5.4	2.25	.....	.....	.....	.....
7	7.65	4.8	18.2	2.3	5.55	2.4	5.65	2.2	.....	.....	.....	.....
8	.....	4.35	17.4	2.35	4.95	2.35	4.35	2.2	.....	.....	.....	.....
9	.....	4.2	15.3	2.55	5.25	2.35	4.2	2.1	.....	.....	.....	.....
10	.....	3.05	10.5	2.6	5.7	2.4	3.0	2.5	.....	.....	.....	.....
11	4.2	3.7	6.15	2.45	6.05	2.5	3.8	2.3	.....	.....	.....	.....
12	.....	3.6	4.8	2.4	6.45	2.2	3.4	2.0	.....	.....	.....	2.2
13	7.0	3.35	4.1	2.35	6.15	2.15	3.1	2.2	.....	.....	.....	2.2
14	8.3	3.4	3.75	4.25	4.1	2.15	2.85	2.0	.....	.....	.....	2.15
15	12.25	3.65	3.4	3.9	4.2	2.15	3.25	1.95	.....	.....	.....	2.15
16	13.7	3.75	3.25	4.55	3.85	2.1	5.2	1.9	.....	.....	.....	2.6
17	14.1	3.95	3.2	7.85	3.6	2.1	5.9	1.8	.....	.....	.....	2.6
18	14.9	4.4	3.05	10.15	3.3	2.1	6.3	1.85	.....	.....	.....	2.7
19	15.0	4.75	2.95	.....	3.05	2.5	6.85	1.85	.....	.....	.....	2.5
20	14.9	4.8	2.9	7.7	2.9	2.0	6.45	1.8	.....	.....	.....	2.5
21	14.8	.....	2.75	6.0	2.7	2.0	6.0	1.8	.....	.....	.....	2.4
22	14.7	.....	2.8	.....	2.55	2.0	5.8	1.7	.....	.....	.....	2.4
23	14.05	9.1	2.65	4.25	4.75	1.95	3.85	3.3	.....	.....	.....	2.5
24	13.9	10.9	2.6	3.8	6.3	1.95	3.1	4.3	.....	.....	.....	2.6
25	9.9	11.65	2.65	3.8	8.6	1.95	3.0	6.2	.....	.....	.....	2.6
26	6.55	10.6	2.55	4.15	9.3	1.9	2.9	6.65	.....	.....	.....	2.8
27	5.7	14.75	2.55	6.55	7.9	1.9	2.9	5.05	.....	.....	.....	2.15
28	5.05	16.4	2.45	8.05	4.7	5.3	3.0	4.85	.....	.....	.....	2.25
29	5.0	.....	2.35	7.7	3.9	3.2	5.5	4.45	.....	.....	.....	3.8
30	5.0	.....	2.25	6.15	3.4	5.9	4.3	4.0	.....	.....	.....	6.4
31	4.65	.....	2.35	.....	3.1	.....	4.0	3.8	.....	.....	.....	9.15
1911												
1	9.7	6.55	9.45	4.3	20.25	1.95	1.55	1.75	2.65	12.9	2.5	4.4
2	9.15	5.35	7.65	3.9	24.6	2.05	1.7	2.6	2.4	14.0	2.4	4.4
3	9.8	4.65	7.25	3.6	25.3	2.1	1.65	4.15	2.25	17.7	2.2	4.3
4	9.0	4.0	6.95	3.45	25.05	1.95	1.65	3.85	2.15	13.4	2.1	4.2
5	8.15	3.45	5.85	7.5	24.3	2.1	1.65	6.55	3.2	11.4	2.0	4.1
6	7.6	4.95	5.6	10.0	23.25	2.05	2.95	4.9	5.35	8.3	3.6	4.0
7	6.25	5.25	5.4	11.2	21.9	2.45	2.5	4.0	5.0	6.3	6.7	3.8
8	4.2	6.8	6.45	10.45	20.15	6.75	2.25	3.2	6.15	7.4	10.5	3.5
9	4.0	6.2	9.0	8.0	18.2	6.6	1.75	3.55	6.0	6.6	10.0	3.3
10	3.65	5.65	10.1	5.85	15.8	5.0	1.95	3.0	5.25	6.0	8.4	3.2
11	3.2	5.2	10.9	4.7	12.75	3.8	2.0	2.65	4.6	5.7	6.1	3.3
12	3.85	4.4	8.75	4.2	9.7	3.2	2.3	2.4	3.3	4.6	7.4	3.5
13	3.8	4.1	6.35	6.55	6.95	2.75	2.0	2.25	3.65	4.0	9.6	7.8
14	3.95	3.9	5.2	15.95	4.3	2.45	1.95	2.4	4.2	3.45	11.4	9.2
15	4.9	4.2	4.6	17.9	3.4	2.3	1.65	2.5	4.2	3.5	10.9	9.6
16	4.2	4.8	4.1	20.45	3.0	2.1	1.8	2.2	3.7	3.9	8.8	7.7

DAILY GAGE HEIGHT, IN FEET, OF BIG MUDDY RIVER NEAR CAMBON, ILLINOIS, FOR 1908-11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1911												
17	4.2	6.3	3.75	20.7	2.8	2.0	1.75	2.25	4.3	2.8	6.4	8.7
18	4.2	9.5	3.5	20.2	2.7	2.1	1.75	6.8	4.4	2.7	5.9	10.2
19	3.85	12.9	3.35	19.35	2.55	2.2	1.7	4.55	5.4	2.5	5.4	10.0
20	3.65	14.65	3.25	18.0	2.45	1.9	1.7	3.0	6.6	2.4	5.4	8.6
21	3.6	15.5	3.15	16.6	2.4	1.85	1.7	2.65	6.55	2.4	5.9	9.4
22	3.45	16.45	3.15	15.2	2.4	1.75	1.5	2.3	5.9	2.4	5.5	11.3
23	3.5	17.85	3.1	12.55	2.35	1.85	1.65	2.15	4.25	2.4	5.1	12.2
24	3.5	17.8	3.4	9.1	2.25	2.0	1.7	2.1	4.5	2.4	5.3	12.3
25	3.6	17.2	3.2	6.4	2.2	1.85	1.55	2.4	4.2	2.5	5.6	11.9
26	3.6	16.15	3.5	4.4	2.1	1.8	1.55	2.6	4.0	2.6	5.2	10.4
27	3.8	14.55	3.65	3.8	2.1	1.9	1.55	2.55	10.05	2.5	5.5	7.7
28	5.1	12.25	3.8	3.65	2.05	1.8	1.5	3.2	12.1	2.4	5.2	6.6
29	6.0	.....	5.25	3.65	2.7	1.8	1.35	3.45	11.05	2.8	5.1	6.8
30	6.8	.....	6.2	14.9	2.0	1.6	1.6	2.7	11.0	2.6	4.6	6.6
31	7.35	.....	4.9	.....	2.0	.....	1.6	2.65	.....	2.5	.....	9.2

NOTE—Ice conditions December 8-31, 1909, January 8-13, and February 16-23, 1910, and January 3-6, 1911. No gage reader September 4-December 11, 1910.

RATING TABLE FOR BIG MUDDY RIVER NEAR CAMBON, ILLINOIS, FROM JUNE 16, 1908-DECEMBER 31, 1911

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.60	1	5.90	239	10.20	900	14.50	2,080
1.70	2	6.00	250	10.30	920	14.60	2,120
1.80	3	6.10	262	10.40	940	14.70	2,160
1.90	5	6.20	274	10.50	960	14.80	2,200
2.00	8	6.30	286	10.60	982	14.90	2,240
2.10	11	6.40	298	10.70	1,004	15.00	2,280
2.20	14	6.50	311	10.80	1,026	15.10	2,320
2.30	17	6.60	324	10.90	1,048	15.20	2,360
2.40	20	6.70	337	11.00	1,070	15.30	2,400
2.50	23	6.80	350	11.10	1,092	15.40	2,450
2.60	27	6.90	363	11.20	1,114	15.50	2,500
2.70	31	7.00	376	11.30	1,136	15.60	2,550
2.80	35	7.10	389	11.40	1,158	15.70	2,600
2.90	39	7.20	402	11.50	1,180	15.80	2,650
3.00	43	7.30	415	11.60	1,202	15.90	2,700
3.10	47	7.40	428	11.70	1,224	16.00	2,750
3.20	51	7.50	441	11.80	1,246	16.10	2,800
3.30	55	7.60	454	11.90	1,268	16.20	2,850
3.40	59	7.70	468	12.00	1,290	16.30	2,900
3.50	63	7.80	482	12.10	1,314	16.40	2,950
3.60	67	7.90	496	12.20	1,338	16.50	3,000
3.70	71	8.00	510	12.30	1,364	16.60	3,060
3.80	75	8.10	526	12.40	1,390	16.70	3,120
3.90	79	8.20	542	12.50	1,416	16.80	3,180
4.00	84	8.30	558	13.60	1,444	16.90	3,240
4.10	89	8.40	574	12.70	1,472	17.00	3,300
4.20	94	8.50	590	12.80	1,500	17.10	3,360
4.30	99	8.60	608	12.90	1,530	17.20	3,420
4.40	104	8.70	626	13.00	1,560	17.30	3,490
4.50	110	8.80	644	13.10	1,590	17.40	3,560
4.60	117	8.90	662	13.20	1,620	17.50	3,630
4.70	124	9.00	680	13.30	1,652	17.60	3,700
4.80	132	9.10	698	13.40	1,684	17.70	3,770
4.90	140	9.20	716	13.50	1,716	17.80	3,840
5.00	148	9.30	734	13.60	1,748	17.90	3,910
5.10	157	9.40	752	13.70	1,780	18.00	3,980
5.20	166	9.50	770	13.80	1,812	18.10	4,050
5.30	176	9.60	788	13.80	1,846	18.20	4,120
5.40	186	9.70	806	14.00	1,880	18.30	4,190
5.50	196	9.80	824	14.10	1,920	18.40	4,260
5.60	206	9.90	842	14.20	1,960	18.50	4,340
5.70	217	10.00	860	14.30	2,000	18.60	4,420
5.80	228	10.10	880	14.40	2,040	18.70	4,450

RATING TABLE FOR BIG MUDDY RIVER NEAR CAMBON, ILLINOIS, FROM JUNE 16, 1908–DECEMBER 31, 1908—*Concluded*

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
18.80	4,580	20.20	5,760	21.60	7,110	23.00	8,580
18.90	4,660	20.30	5,850	21.70	7,215	23.10	8,685
19.00	4,740	20.40	5,940	21.80	7,320	23.20	8,790
19.10	4,820	20.50	6,030	21.90	7,425	23.30	8,895
19.20	4,900	20.60	6,120	22.00	7,530	23.40	9,000
19.30	4,980	20.70	6,210	22.10	7,635	23.50	9,105
19.40	5,060	20.80	6,310	22.20	7,740	23.60	9,210
19.50	5,140	20.90	6,410	22.30	7,845	23.70	9,315
19.60	5,220	21.00	6,510	22.40	7,950	23.80	9,420
19.70	5,310	21.10	6,610	22.50	8,055	23.90	9,525
19.80	5,400	21.20	6,710	22.60	8,160	24.00	9,630
19.90	5,490	21.30	6,810	22.70	8,265	25.00	10,680
20.00	5,580	21.40	6,910	22.80	8,370		
20.10	5,670	21.50	7,010	22.90	8,475		

The above table is not applicable for ice or obstructed channel conditions. It is based on fourteen discharge measurements made during 1908–11 and is fairly well defined. Above gage height 22 feet the rating curve s a tangent, the difference being 105 per tenth.

DAILY DISCHARGE IN SECOND-FEET, OF BIG MUDDY RIVER NEAR CAMBON, ILLINOIS, FOR 1908–11

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1							1	75				
2							1	43				
3							1	31				
4							1	20				
5							1	14				
6							1	23				
7							1	63				
8							1	51				
9							1	43				
10							1	75				
11							1	63				
12							1	63				
13							1	31				
14							1	23				
15							1	17				
16						23	1	11				
17						17	1	5				
18						14	1	5				
19						11	1	3				
20						8	1	3				
21						8	1	2				
22						5	1	2				
23						5	89	1				
24						3	35	1				
25						3	11	1				
26						2	5	1				
27						2	3	1				
28						1	2	1				
29						1	1	*				
30						1	124					
31							140					
1909												
1	*	27	3,180	69	851	140	286	140	1	20	3	43
2		27	2,200	57	950	99	110	860	1	17	2.5	35
3		27	1,530	53	461	75	69	900	1	14	2.5	31
4		27	900	53	166	73	43	196	1	12	2.5	27
5		71	350	53	84	136	31	148	0.5	12	2.5	25
6		79	196	274	79	993	25	59	0.5	11	2.5	25
7		89	124	920	181	1,140	20	47	0.5	5	2.5	25
8		166	89	1,200	124	982	217	157	2	5	3	20
9		228	2,950	1,110	110	797	262	363	2	5	4	15
10		239	6,710	920	415	311	212	99	2	5	4	12
11		250	9,940	842	590	94	582	59	1.5	4	4	51
12		262	10,400	389	428	63	1,860	55	1.5	4	4	415
13		337	9,420	1,850	337	176	2,450	55	1.5	4	4	940

* No flow from August 29, 1908–January 21, 1909.

DAILY DISCHARGE, IN SECOND-FEET, OF BIG MUDDY RIVER, NEAR CAMBON, ILLINOIS, FOR 1908-11—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
14	.....	1,220	7,420	2,260	152	716	4,700	49	1.5	3	5	1,420
15	.....	1,960	6,120	2,980	94	982	6,080	45	1.5	3	63	1,640
16	.....	2,080	4,490	3,600	94	1,110	5,940	69	14	2.5	132	1,730
17	.....	2,700	3,240	4,260	94	880	5,360	20	11	2	110	1,760
18	.....	2,750	1,470	3,360	89	356	4,450	17	9.5	2	262	1,680
19	.....	2,950	960	2,900	67	75	3,120	14	8	2	350	770
20	.....	2,850	806	3,560	51	51	1,310	8	8	2	262	274
21	.....	2,380	542	4,700	39	39	550	3	6.5	2	206	186
22	2	2,400	475	5,620	31	35	162	2.5	22	2	157	114
23	23	2,950	304	5,720	23	29	79	2.5	206	2	337	64
24	99	4,450	140	5,800	23	22	45	2	617	2	376	51
25	79	6,030	356	5,760	22	132	31	2	503	2.5	626	35
26	67	6,510	635	4,160	59	448	23	2	206	3	454	30
27	55	6,030	496	3,330	196	542	59	2	94	3	196	2[illegible]
28	51	4,660	274	2,080	590	370	67	2	59	3	196	12
29	51	.....	217	662	851	422	51	2	43	3	132	10
30	47	.....	110	833	635	311	39	1.5	31	3	57	8
31	27	.....	84	.....	324	.....	31	1.5	.....	3	.....	8
1910												
1	10	94	4,700	16	162	35	89	51	65	.....	.....	.....
2	31	79	6,860	16	181	17	47	51	53	.....	.....	.....
3	51	73	7,900	12	79	17	51	37	79	.....	.....	.....
4	84	71	7,690	14	191	16	94	27	.....	.....	.....	.....
5	110	69	6,760	16	234	16	124	18	.....	.....	.....	.....
6	280	84	5,490	17	318	17	186	16	.....	.....	.....	.....
7	461	132	4,120	17	201	20	212	14	.....	.....	.....	.....
8	350	102	3,560	18	144	18	102	14	.....	.....	.....	.....
9	240	94	2,400	25	171	18	94	11	.....	.....	.....	.....
10	160	45	960	27	217	20	43	23	.....	.....	.....	.....
11	94	71	268	22	256	23	75	17	.....	.....	.....	.....
12	206	67	132	20	304	14	59	8	.....	.....	.....	14
13	376	57	89	18	268	12	47	14	.....	.....	.....	14
14	558	59	73	96	89	12	37	8	.....	.....	.....	12
15	1,350	69	59	79	94	12	53	6	.....	.....	.....	12
16	1,780	50	53	114	77	11	166	5	.....	.....	.....	27
17	1,920	50	51	489	67	11	239	3	.....	.....	.....	27
18	2,240	25	45	890	55	11	286	4	.....	.....	.....	31
19	2,280	40	41	662	45	23	356	4	.....	.....	.....	23
20	2,240	50	39	468	39	8	304	3	.....	.....	.....	23
21	2,200	80	33	250	31	8	250	3	.....	.....	.....	20
22	2,160	100	35	157	25	8	228	2	.....	.....	.....	22
23	1,900	698	29	96	128	6	77	55	.....	.....	.....	23
24	1,850	1,050	27	75	286	6	47	99	.....	.....	.....	27
25	842	1,210	29	75	608	6	43	274	.....	.....	.....	27
26	318	982	25	92	734	5	39	330	.....	.....	.....	35
27	217	2,180	25	318	496	5	39	152	.....	.....	.....	12
28	152	2,950	22	518	124	176	43	136	.....	.....	.....	16
29	148	.....	18	468	79	51	196	107	.....	.....	.....	75
30	148	.....	18	268	59	239	99	84	.....	.....	.....	298
31	120	.....	18	.....	47	.....	84	75	.....	.....	.....	707
1911												
1	806	318	761	99	5,800	6.5	0.5	2.5	29	1,530	23	104
2	707	181	461	79	10,300	9.5	2	27	20	1,880	20	104
3	700	120	408	67	11,000	11	1.5	92	16	3,770	14	99
4	600	84	376	61	10,700	6.5	1.5	77	12	1,680	11	94
5	450	61	234	441	9,940	11	1.5	318	51	1,160	8	89
6	300	144	206	880	8,840	9.5	41	140	181	558	67	84
7	280	171	186	1,110	7,420	22	23	84	148	286	337	75
8	94	350	304	950	5,720	344	16	51	268	428	960	63
9	84	274	680	510	4,120	324	2.5	65	250	324	860	55
10	69	212	880	234	2,650	148	6.5	43	171	250	574	51
11	51	166	1,050	124	1,490	75	8	29	117	217	262	55
12	77	104	635	94	806	51	17	20	55	117	428	63
13	75	89	202	318	370	33	8	16	69	84	788	482
14	82	79	166	2,720	99	22	6.5	20	94	61	1,160	716
15	140	94	117	3,910	59	17	1.5	23	94	63	1,050	788
16	94	132	89	5,980	43	11	3	14	71	79	644	468
17	94	286	73	6,210	35	8	2.5	16	99	35	298	626
18	94	770	63	5,760	31	11	2.5	350	104	31	239	900
19	77	1,530	57	5,020	25	14	2	114	186	23	186	860
20	69	2,140	53	3,980	22	5	2	43	324	20	186	608
21	67	2,500	49	3,060	20	4	2	29	318	20	239	752
22	61	2,980	49	2,360	20	2.5	.0	17	239	20	196	1,140
23	63	3,880	47	1,430	18	4	1.5	12	96	20	157	1,340
24	63	3,840	59	698	16	8	2	11	110	20	176	1,360

DAILY DISCHARGE, IN SECOND-FEET, OF BIG MUDDY RIVER NEAR CAMBON, ILLINOIS, FOR 1908–11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1911												
26	67	3,420	51	298	14	4	.5	20	94	23	206	1,270
26	67	2,320	63	104	11	3	.5	27	84	27	166	940
27	75	2,100	69	75	11	5	.5	25	870	23	196	468
28	157	1,350	75	69	9.5	3	.0	51	1,310	20	166	324
29	250	.....	171	69	31	3	.0	61	1,090	35	157	350
30	350	.....	274	2,240	8	1	1	31	1,070	27	117	324
31	422	.....	140	.....	8	.....	1	29	.....	23	.....	716

NOTE—Daily discharges are obtained from a rating table fairly well defined and based on discharge measurements made during 1908–11.

Daily discharge estimated because of ice conditions for December 8–10, 24–31, 1909, January 8–10, February 16–22, 1910, and January 3–6, 1911

The daily and monthly discharges published here differ from those previously published in U. S. Geological Survey Water Supply Papers Nos 265 and 285, and in the report of the Internal Improvement Commission of Illinois on Surface Water 1908–10, because of revising rating curve on account of discharge measurements made in 1911.

MONTHLY DISCHARGE OF BIG MUDDY RIVER, NEAR CAMBON, ILLINOIS, FOR 1908–11

[Drainage area, 735 square miles]

Month	Discharge in second-feet				Runoff—depth in inches on drainage area	Accuracy
	Maximum	Minimum	Mean	Per square mile		
1908						
June (16–30)	.....	.....	6.94	0.009	0.005	.....
July	140	1	13.9	.020	.023	.....
August	75	0	21.7	.030	.035	.....
1909						
January	89	0	15.8	0.021	0.02	.....
February	6,510	27	1,920	2.62	2.73	.....
March	10,400	84	2,460	3.35	3.86	.....
April	5,860	53	2,310	3.14	3.50	.....
May	950	22	265	.360	.42	.....
June	1,140	22	387	.526	.59	.....
July	6,050	20	1,230	1.67	1.92	.....
August	900	1.5	109	.148	.17	.....
September	617	0.5	61.9	.064	.07	.....
October	20	2	5.26	.007	.01	.....
November	626	2.5	132	.018	.02	.....
December	1,760	.....	370	.504	.58	.....
The year	10,400	0	764	1.04	13.89	.....
1910						
January	2,280	.....	802	1.09	1.26	.....
February	2,950	.....	380	.517	.54	.....
March	7,900	18	1,660	2.26	2.61	.....
April	890	12	178	.242	.27	.....
May	734	25	187	.254	.29	.....
June	239	5	28.0	.038	.04	.....
July	356	37	123	.167	.19	.....
August	330	1	53.2	.072	.08	.....
December	707	12	72.2	.098	.07	.....
The period	7,900	1	403	0.549	5.35	.....
1911						
January	806	51	212	0.288	0.33	C.
February	3,880	61	1,080	1.47	1.53	B.
March	1,050	47	262	.356	.41	B.
April	6,210	61	1,630	2.22	2.48	B.
May	11,000	8	2,570	3.50	4.04	B.
June	344	1	39.2	.053	.06	C.
July	41	0	5.10	.0069	.008	D.
August	350	2.5	59.9	.081	.09	C.
September	1,310	12	254	.346	.39	B.
October	3,770	20	415	.565	.65	B.
November	1,160	8	330	.449	.50	B.
December	1,360	51	496	.675	.78	B.
The year	11,000	0	609	0.829	11.268	

BEAUCOUP CREEK NEAR PINCKNEYVILLE, ILLINOIS

Location.—At Illinois Central Railroad bridge about 1½ miles east of Pinckneyville, Ill., about 10 miles above the mouth of Galum Creek.

Records available.—June 17, 1908, to December 31, 1911. During 1908, the gage was read only when the observer happened to be in the vicinity. Except for a few days, however, fairly accurate results will be obtained if the discharge is interpolated on days when gage was not read.

Drainage area.—Two hundred and twenty-seven square miles.

Gage.—Standard chain gage attached to bridge; datum unchanged.

Channel.—Probably permanent; poor for low water measurements because of low velocity and old piles in channel.

Discharge measurements.—Made from downstream side of wooden trestle. Low water measurements made at wading section about 250 yards upstream.

Floods.—The flood of 1902 reached a height of about 27.5 feet on the present gage.

Winter flow.—Ice affects the relation between gage height and discharge during portions of December, January, and February.

Remarks.—The creek goes dry at times, the water then standing in pools near the gage.

DISCHARGE MEASUREMENTS OF BEAUCOUP CREEK, NEAR PINCKNEYVILLE, ILLINOIS, IN 1908–11

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet	*Square feet*	*Feet*	*Second-feet*
1908					
June 17	R. J. Taylor	53	48	2.3	12
1909					
February 21	R. J. Taylor	130	916	9.67	602
March 13	W. M. O'Neill	87	289	3.97	76
March 26	W. M. O'Neill	130	862	8.95	502
March 26	W. M. O'Neill	128	692	7.87	449
March 27	W. M. O'Neill	106	396	5.25	170
May 11	H. J. Jackson	128	652	7.42	304
May 11	H. J. Jackson	107	477	5.93	217
November 3	H. J. Jackson	66	67	1.73	0
1910					
May 22	C. T. Bailey	65	75	2.41	9.2
May 24	C. T. Bailey	122	538	7.24	373
May 25	C. T. Bailey	104	309	5.28	147
December 13	Bailey and Monk	5	1.4	2.27	*1.3
1911					
March 11	P. S. Monk	88	196	4.31	95.4
October 24	Monk and Brown	16	23.9	2.68	*18.2

* Not at regular gaging section.

DAILY GAGE HEIGHT, IN FEET, OF BEAUCOUP CREEK NEAR PINCKNEYVILLE, ILLINOIS, FOR 1908–11

[R. C. Huggins, observer]

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1							3.4					2.0
2									1.6			
3							2.3	1.9		1.2		
4												

DAILY GAGE HEIGHT, IN FEET, OF BEAUCOUP CREEK, NEAR PINCKNEYVILLE, ILLINOIS, FOR 1908–11
—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
5									1.6		1.0	1.9
6								2.9				
7								6.0				
8							2.2		1.6			
9												1.8
10										1.2		
11							2.0	2.3			1.0	
12												1.8
13									1.6			
14							1.9					
15								2.0				
16												1.7
17						2.3				1.0		
18							1.8	1.8				
19						2.0			1.5			1.7
20						2.0						
21							1.8			1.0	1.0	1.7
22								1.4	1.3			
23												
24						1.8						
25						1.8	2.9	1.7				
26												1.6
27							3.5		1.2		1.0	
28										1.0		
29						1.8	2.8	1.7				1.6
30												
31												1.6
1909												
1	1.8	2.5	3.9	2.8	2.8	4.5	3.5	5.2	1.6	1.8	1.7	2.4
2				2.85	2.75	3.1	2.2	3.1	1.6	1.8	1.7	2.3
3			3.7	2.75	2.7	2.7	2.1	2.45	1.6	1.8	1.75	2.3
4	1.8	2.5	3.1	2.7	2.6	3.7	2.0	2.3	1.6	1.8	1.7	2.2
5				3.2	2.55	5.0	1.95	2.2	1.6	1.75	1.7	2.25
6		3.3	2.7	8.9	2.75	4.5	1.9	2.1	1.6	1.7	1.7	2.3
7				12.8	3.9	3.8	1.9	2.75	1.75	1.7	1.7	2.3
8		4.1		12.75	4.6	2.9	7.4	2.65	1.7	1.65	1.7	2.5
9	1.8		20.85	4.6	7.8	2.5	12.0	2.55	1.75	1.65	1.6	2.5
10			20.7	3.75	12.6	2.1	5.4	2.2	1.85	1.65	1.8	2.6
11	1.8	3.3	17.3	2.7	5.9	2.0	14.5	2.1	1.8	1.65	1.9	3.1
12				2.6	4.4	2.0	15.85	2.0	1.75	1.65	1.95	8.2
13		3.4	4.0	16.0	4.1	1.95	18.8	1.9	1.7	1.6	1.9	13.25
14				19.7	3.4	1.9	16.0	1.85	1.7	1.6	3.75	11.35
15		14.1	3.1	11.3	4.3	1.9	6.7	1.8	1.7	1.6	3.9	6.85
16	1.7	12.0	3.1	7.5	5.0	1.9	4.1	1.8	1.65	1.6	3.3	5.6
17		5.1	2.8	5.2	4.5	1.9	2.75	1.75	1.65	1.6	3.2	4.55
18		4.5	2.7	4.9	4.1	1.85	2.5	1.75	1.6	2.0	4.2	3.45
19			2.7	9.1	2.6	1.8	2.45	1.7	1.6	1.95	3.9	3.2
20		13.6	2.9	12.8	2.5	1.8	2.2	1.7	1.55	1.85	2.9	3.1
21	1.7		3.55	19.2	2.4	1.75	2.1	1.6	1.95	1.85	2.55	2.75
22			3.6	17.9	2.3	1.7	2.5	1.6	2.5	2.0	2.5	2.35
23	2.3	9.1	3.7	14.1	2.2	1.7	2.0	1.65	4.3	1.95	3.55	2.2
24		16.6	3.85	10.3	2.1	1.7	1.9	1.7	5.2	1.9	9.2	2.1
25		16.4	6.6	8.1	2.1	1.7	1.9	1.65	5.0	1.85	4.4	2.15
26	2.3	4.9	9.9	6.3		1.7	2.1	1.65	3.1	1.85	3.2	2.2
27		4.1	5.25	5.4	4.3	3.0	2.55	1.65	2.2	1.8	2.75	2.2
28				4.0	3.4	2.95	5.0	1.65	2.1	1.8	2.55	2.15
29	2.2		3.1	3.1	2.5	2.5	3.75	1.6	2.0	1.75	2.5	2.1
30			3.0	2.9	3.6	4.9	2.7	1.6	1.95	1.75	2.5	2.1
31			2.1		4.9		3.45	1.6		1.7		2.1
1910												
1	2.1	2.85	19.85	2.15	2.9	2.1		2.1	1.95	2.15	2.25	2.45
2	2.4	2.7	17.25	2.2	2.8	2.1	1.9	2.05	2.0		2.15	2.35
3	2.55	2.8	15.9	2.15	4.0	2.05		2.0	2.3	2.05	2.2	2.35
4	4.2	2.95	9.45	2.2	8.15	2.0	5.2	1.9		10.25	2.15	2.35
5	3.8	3.0	6.2	2.25	5.1		6.0	1.9	8.65		2.15	2.35
6	4.0	3.1	5.45	2.95	3.75	2.1	5.7	1.8	13.8	15.7		2.35
7	5.4	3.0	4.4	2.3	3.85	2.05			15.2	16.1	2.2	2.35
8	4.2	3.05	3.85	2.2		2.0	3.5	1.9	17.9	17.0	2.15	2.35
9	3.8	2.8	3.45	2.4	5.55	2.25	2.75	1.8	17.4			2.3
10	2.4	2.75	3.3	2.3	4.2	2.4		1.8	17.0	3.75		2.3
11	2.5	2.7	3.1	2.25	3.55	2.25	2.6	1.8	4.65			2.3
12	2.35	2.6	2.95	2.6	3.6	2.15		1.8	3.45	2.75		2.3
13	7.55	2.75	2.95	2.35	3.55	2.1	2.25	1.7	2.9	2.65		2.3
14	13.2	2.9	2.8	2.95	3.25	2.1	2.25		2.55	2.5		2.3
15	14.8	3.0	2.8	2.9	3.05	2.1	2.2	1.7	2.4	2.4		2.25
16	10.3	3.05	2.65	3.15	2.7	2.1	2.7	1.75	2.3			2.25
17	5.55	3.15	2.6		3.0	2.05	5.7	1.75	2.25	2.3		2.25

DAILY GAGE HEIGHT, IN FEET, OF BEAUCOUP CREEK, NEAR PINCKNEYVILLE, ILLINOIS, FOR 1908–11
—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1910												
18	8.0	3.35	2.55	5.25	2.45	2.0	3.75	1.75	2.2	2.25	2.1	2.25
19	14.05	3.4	2.55	4.15	2.4	1.95	.....	.....	2.1	2.3	.....	2.25
20	9.8	3.5	2.55	.....	2.65	1.9	.....	1.7	.....	2.3	2.1	2.2
21	7.3	3.5	2.45	3.25	2.6	1.9	.....	.....	2.1	2.3	2.1	2.2
22	6.2	4.6	2.45	3.0	2.4	1.9	2.05	1.7	2.05	2.3	.....	.....
23	4.45	6.05	2.45	2.75	3.7	1.8	2.0	2.1	2.05	.....	.....	.....
24	3.45	5.35	2.4	2.7	7.0	1.8	.....	9.8	2.0	2.25	.....	.....
25	3.2	5.0	2.4	2.65	5.4	1.75	2.0	6.5	.....	2.3	.....	2.25
26	3.1	4.15	2.35	2.65	3.7	.....	2.0	4.8	2.1	.....	.....	2.25
27	3.0	14.2	2.3	3.3	3.05	1.7	2.0	3.3	.....	2.2	.....	2.2
28	3.45	21.1	2.3	4.05	2.7	2.9	3.25	.....	.....	2.25	.....	2.5
29	4.0	.....	2.25	3.85	2.45	2.2	2.65	2.55	.....	.....	.....	2.8
30	3.6	.....	2.25	3.25	2.3	2.05	2.4	2.3	.....	2.2	.....	4.05
31	2.95	.....	2.2	.....	2.2	.....	.....	2.2	.....	2.15	.....	4.8
1911												
1	4.0	2.3	3.7	2.85	21.05	2.0	1.95	2.0	2.4	3.8	2.25	3.0
2	3.8	2.3	4.4	2.8	20.0	2.0	.....	1.95	2.4	.....	2.2	2.85
3	4.35	2.8	4.6	2.7	14.5	2.0	1.95	5.15	.....	6.0	2.2	2.7
4	3.7	2.7	4.25	2.8	8.5	.....	1.95	.....	.....	3.7	2.15	2.6
5	3.2	.....	3.9	5.6	4.3	2.0	1.9	5.25	.....	.....	2.15	2.55
6	2.8	2.8	3.7	5.6	3.65	2.0	1.9	.....	4.95	3.0	4.5	2.5
7	2.65	2.95	3.85	4.0	.....	2.0	1.9	2.9	7.5	.....	4.4	2.5
8	2.55	3.1	8.3	3.0	3.0	2.0	1.9	4.0	.....	.....	5.4	2.5
9	2.5	3.0	.....	3.0	2.9	2.0	.....	4.2	.....	3.05	3.05	2.6
10	2.5	2.1	4.9	2.8	2.8	2.0	1.85	2.7	3.3	.....	3.0	4.8
11	2.5	2.75	4.35	.....	2.8	1.95	1.85	2.65	3.45	.....	2.8	5.9
12	2.5	2.65	3.9	2.7	2.6	1.9	1.95	2.6	2.8	2.05	3.15	6.0
13	2.5	2.6	3.55	10.5	2.5	1.9	1.95	.....	3.0	2.5	5.2	4.3
14	2.6	2.6	3.15	16.0	2.5	1.9	1.95	2.25	2.7	2.4	4.75	3.3
15	2.6	2.6	.....	17.7	2.5	.....	1.9	2.15	2.45	2.35	3.9	.....
16	2.6	2.9	2.8	7.4	2.5	1.9	1.95	2.1	2.7	2.35	3.2	5.0
17	2.6	3.5	2.7	4.4	2.4	1.9	1.95	2.0	3.45	.....	2.3	5.6
18	2.6	4.35	2.6	3.9	2.4	.....	1.9	2.0	5.85	2.3	2.3	3.5
19	2.5	.....	2.6	7.4	2.4	2.2	1.9	1.95	8.9	2.3	3.2	3.3
20	2.55	15.0	2.6	8.6	2.4	2.0	1.9	.....	3.9	2.25	3.2	.....
21	2.5	12.0	2.6	5.0	.....	2.0	2.0	1.9	.....	2.25	3.1	6.8
22	2.5	5.65	2.6	3.95	2.3	2.0	1.95	1.9	.....	2.6	2.9	8.85
23	2.6	4.95	.....	.....	2.3	2.0	.....	1.9	3.9	2.4	2.85	5.85
24	2.55	4.6	1.85	3.0	2.6	2.0	1.95	.....	.....	2.4	2.8	4.85
25	2.6	5.55	1.9	2.85	2.5	2.0	1.9	2.2	2.5	2.9	2.85	3.7
26	2.6	6.3	.....	2.8	2.4	2.0	1.9	2.2	6.25	2.7	3.6	3.5
27	2.6	6.1	3.45	.....	2.3	2.0	1.9	.....	9.0	2.55	3.1	3.3
28	4.6	4.5	3.5	2.75	2.15	2.0	1.9	2.4	5.0	2.4	3.0	4.1
29	.....	.....	3.85	7.05	2.2	2.0	1.9	.....	3.7	2.4	2.8	3.4
30	4.3	.....	3.15	19.05	2.0	2.0	.....	2.5	3.1	2.4	.....	4.3
31	3.6	.....	3.0	.....	2.0	.....	1.95	2.4	.....	2.4	.....	.....

NOTE—Ice conditions December 8-31, 1909, during protions of February and December, 1910, and January 3-9, 1911.

DISCHARGE TABLE FOR BEAUCOUP CREEK, NEAR PINCKNEYVILLE, ILLINOIS, FROM JUNE 17, 1908, TO DECEMBER 31, 1911

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.20	0.0	2.70	20	4.20	92	5.70	203
1.30	0	2.80	24	4.30	98	5.80	211
1.40	1	2.90	28	4.40	105	5.90	219
1.50	1	3.00	32	4.50	112	6.00	227
1.60	1	3.10	36	4.60	119	6.10	236
1.70	2	3.20	40	6.70	126	6.20	245
1.80	2	3.30	45	4.80	133	6.30	254
1.90	3	3.40	50	4.90	140	6.40	263
2.00	3	3.50	55	5.00	147	6.50	272
2.10	4	3.60	60	5.10	155	6.60	281
2.20	6	3.70	65	5.20	163	6.70	290
2.30	8	3.80	70	5.30	171	6.80	299
2.40	11	3.90	75	5.40	179	6.90	308
2.50	14	4.00	80	5.50	187	7.00	317
2.60	17	4.10	86	5.60	195	7.10	326

DISCHARGE TABLE FOR BEAUCOUP CREEK, NEAR PINCKNEYVILLE, ILLINOIS, FROM JUNE 17, 1908, TO DECEMBER 31, 1911—*Concluded*

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
7.20	335	8.90	512	10.60	718	12.30	942
7.30	344	9.00	523	10.70	731	12.40	956
7.40	353	9.10	534	10.80	744	12.50	970
7.50	363	9.20	545	10.90	757	12.60	984
7.60	373	9.30	556	11.00	770	12.70	998
7.70	383	9.40	568	11.10	783	12.80	1,012
7.80	393	9.50	580	11.20	796	12.90	1,026
7.90	403	9.60	592	11.30	809	13.00	1,040
8.00	413	9.70	604	11.40	822	14.00	1,180
8.10	424	9.80	616	11.50	835	15.00	1,320
8.20	435	9.90	628	11.60	848	16.00	1,460
8.30	446	10.00	640	11.70	861	17.00	1,600
8.40	457	10.10	653	11.80	874	18.00	1,740
8.50	468	10.20	666	11.90	887	19.00	1,880
8.60	479	10.30	679	12.00	900	20.00	2,020
8.70	490	10.40	692	12.10	914	21.00	2,160
8.80	501	10.50	705	12.20	928	22.00	2,300

NOTE—The above table is not applicable for ice conditions. It is based on seventeen discharge measurements made during 1908–11, and is well defined between gage heights 2.3 and 6.0 feet and is fairly well defined between gage heights 6.1 feet and 10.0 feet. Above gage height 12.0 feet the rating curve is a tangent, the difference being fourteen per tenth.

DAILY DISCHARGE, IN SECOND-FEET, OF BEAUCOUP CREEK, NEAR PINCKNEYVILLE, ILLINOIS, FOR 1908–11.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1							50					3.0
2									1			
3							8	3		0		
4											0	
5									1			3.0
6								28				
7								227				
8							6					
9												2.0
10										0	0	
11							3	8				
12												2.0
13									1			
14							3					
15								3				
16												2.0
17						8				0		
18							2	2				
19						3	2.5		1			2.0
20						3						
21							2			0	0	2.0
22								1	0			
23										0	0	
24						2						
25						2	28	2				
26												1.0
27							55		0			
28										0		
29						2	24	2				1.0
30												
31												1.0
1909												
1	2	14	75	24	24	112	55	163	1	2	2	11
2	2	14	70	26	22	36	6	36	1	2	2	8
3	2	14	65	22	20	20	4	12	1	2	2	8
4	2	14	36	20	17	65	3	8	1	2	2	6
5	2	30	28	40	16	147	3	6	1	2	2	7
6	2	45	20	512	22	112	3	4	1	2	2	8
7	2	66	727	1,010	75	70	3	22	2	2	2	8
8	2	86	1,430	1,000	119	28	353	18	2	1.5	2	14
9	2	72	2,140	119	393	14	900	16	2	1.5	1	14
10	2	59	2,120	68	984	4	179	6	2.5	1.5	2	17
11	2	45	1,640	20	219	3	1,250	4	2	1.5	3	36
12	2	48	860	17	105	3	1,440	3	2	1.5	3	435
13	2	50	80	1,460	86	3	1,850	3	2	1	3	1,080

DAILY DISCHARGE, IN SECOND-FEET, OF BEAUCOUP CREEK, NEAR PINCKNEYVILLE, ILLINOIS, FOR 1908-11—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
14	2	620	58	1,980	50	3	1,460	2.5	2	1	68	816
15	2	1,190	36	809	98	3	290	2	2	1	75	304
16	2	900	36	363	147	3	86	2	1.5	1	45	195
17	2	155	24	163	112	3	22	2	1.5	1	40	116
18	2	112	20	140	86	2.5	14	2	1	3	92	52
19	2	616	20	534	17	2	12	2	1	3	75	40
20	2	1,120	28	1,010	14	2	6	2	.1	2.5	28	36
21	2	600	58	1,910	11	2	4	1	3	2.5	16	22
22	5	567	60	1,730	8	2	14	1	14	3	14	10
23	8	534	65	1,190	6	2	3	1.5	98	3	58	6
24	8	1,540	72	679	4	2	3	2	163	3	545	4
25	8	1,520	281	424	4	2	3	1.5	147	2.5	105	5
26	8	140	628	254	51	2	4	1.5	36	2.5	40	6
27	7	86	167	179	98	32	16	1.5	6	2	22	6
28	7	80	99	80	50	30	147	1.5	4	2	16	4
29	6	.....	36	36	14	14	68	1	3	2	14	3
30	9	.....	32	28	60	140	20	1	3	2	14	3
31	11	.....	4	.....	140	.....	52	1	.....	2	.....	2
1910												
1	4	26	2,000	5	28	4	4	4	3	5	7	8
2	11	20	1,640	6	24	4	3	3	3	4	5	7
3	16	24	1,450	5	80	4	80	3	8	3	6	7
4	92	30	574	6	430	3	163	3	240	672	5	6
5	70	32	245	7	155	4	227	3	484	1,050	5	6
6	80	36	183	30	68	4	203	2	1,150	1,420	6	5
7	179	32	105	8	72	4	129	2	1,350	1,470	6	5
8	92	34	72	6	126	3	55	3	1,730	1,600	5	4
9	70	24	52	11	191	7	22	2	1,660	834	4	3
10	11	22	45	8	92	11	20	2	1,600	68	4	2
11	14	20	36	7	58	7	17	2	122	45	4	2
12	10	17	30	17	60	5	12	2	52	22	4	1
13	368	22	30	10	58	4	7	2	28	18	4	1
14	1,070	28	24	30	42	4	7	2	16	14	4	1
15	1,290	32	24	28	34	4	6	2	11	11	4	1
16	679	34	18	38	20	4	20	2	8	10	4	1
17	191	38	17	92	32	4	203	2	7	8	4	1
18	413	48	16	167	12	3	68	2	6	7	4	1
19	1,190	50	16	89	11	3	52	2	4	8	4	1
20	616	55	16	65	18	3	36	2	4	8	4	1
21	344	55	12	42	17	3	20	2	4	8	4	1
22	245	119	12	32	9	3	3	2	3	8	4	1
23	108	232	12	22	65	2	3	4	3	8	4	1
24	52	175	11	20	317	2	3	616	3	7	4	1
25	40	147	11	18	179	2	3	272	4	8	6	1
26	36	89	10	18	65	2	3	133	4	7	6	1
27	32	1,210	8	45	34	2	3	45	4	6	8	1
28	52	2,170	8	83	20	28	42	16	4	7	10	8
29	80	.....	7	72	12	6	18	16	4	6	10	24
30	60	.....	7	42	8	4	11	8	4	6	11	83
31	30	.....	6	.....	6	.....	8	6	.....	5	.....	133
1911												
1	80	8	65	26	2,170	3	3	3	11	70	7	32
2	70	8	105	24	2,020	3	3	3	11	148	6	26
3	50	24	119	20	1,250	3	3	159	11	227	6	20
4	40	20	95	24	468	3	3	163	11	65	5	17
5	30	20	75	195	98	3	3	167	20	48	5	16
6	25	24	65	195	62	3	3	98	144	32	112	14
7	20	30	72	80	42	3	3	28	363	33	105	14
8	20	36	446	32	32	3	3	80	300	33	179	14
9	15	32	500	32	28	3	3	92	200	34	34	17
10	14	4	140	24	24	3	2.5	20	45	24	32	133
11	14	22	102	22	24	3	2.5	18	52	14	24	219
12	14	18	75	20	17	3	3	17	24	3.5	38	227
13	14	17	58	705	14	3	3	12	32	14	163	98
14	17	17	38	1,460	14	3	3	7	20	11	130	45
15	17	17	31	1,700	14	3	3	5	12	9.5	75	96
16	17	28	24	353	14	3	3	4	20	9.5	40	147
17	17	55	20	105	11	3	3	3	52	8.8	8	195
18	17	102	17	75	11	4	3	3	215	8	8	55
19	14	1,200	17	353	11	6	3	3	512	8	40	45
20	16	1,320	17	479	11	3	3	3	75	7	40	172
21	14	900	17	147	10	3	3	3	75	7	36	299
22	14	199	17	78	8	3	3	3	75	17	28	506
23	17	144	9.8	55	8	3	3	3	75	11	26	215
24	16	119	2.5	32	17	3	3	4	45	11	24	136
25	17	191	3	26	14	3	3	6	14	28	26	65
26	17	254	30	24	11	3	3	6	250	20	60	55

DAILY DISCHARGE, IN SECOND-FEET, OF BEAUCOUP CREEK, NEAR PINCKNEYVILLE, ILLINOIS, FOR 1908-11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1911												
27	17	236	52	23	8	3	3	8	523	16	36	45
28	119	112	55	22	5	3	3	11	147	11	32	86
29	108	.....	72	322	6	3	3	12	65	11	24	50
30	98	.....	38	1,890	3	3	3	14	36	11	28	98
31	60	.....	32	.....	3	.....	3	11	.....	11	.....	185

NOTE—Daily discharge December 29-31, 1909; December, 1910, and January 3-9, 1911, estimated because of ice, from climatological and runoff records in adjacent drainage areas, and gage observer's notes.
Daily discharge interpolated or estimated from climatological records and runoff in adjacent drainage areas on days when gage was not read.

MONTHLY DISCHARGE OF BEAUCOUP CREEK, NEAR PINCKNEYVILLE, ILLINOIS, FOR 1908-11
[Drainage area, 227 square miles]

Month	Discharge in second-feet				Runoff—depth in inches on drainage area	Accuracy
	Maximum	Minimum	Mean	Per square mile		
1908						
June (14-30)	.....	.....	3.3	0.015	0.008	.....
July	.....	.....	16.7	.074	.09	.....
August	.....	.....	30.7	.135	.16	.....
September	.....	.....	.7	.0031	.003	.....
December	.....	.....	1.9	.0084	.01	.....
1909						
January	.....	.....	3.8	.017	.02	.....
February	1,540	.....	389	1.63	1.70	.....
March	2,140	4	355	1.56	1.80	.....
April	1,980	17	528	2.33	2.60	.....
May	984	4	99.1	.437	.50	.....
June	147	2	28.8	.127	.14	.....
July	1,850	3	267	1.18	1.36	.....
August	163	1	10.6	.047	.05	.....
September	163	1	16.9	.074	.08	.....
October	3	1	1.98	.0087	.01	.....
November	545	1	43.2	.019	.02	.....
December	1,080	.....	106	.467	.54	.....
The year	2,140	.....	154	.678	8.82	.....
1910						
January	1,290	4	243	1.07	1.23	B.
February	2,170	17	172	.758	.79	C.
March	2,000	6	216	.952	1.10	C.
April	167	5	34.3	.151	.17	B.
May	430	6	75.6	.333	.38	B.
June	28	2	4.8	.021	.02	C.
July	227	3	46.2	.204	.24	B.
August	616	2	37.7	.166	.19	B.
September	1,730	3	284	1.25	1.40	B.
October	1,600	4	237	1.04	1.20	B.
November	11	4	5.33	.023	.03	C.
December	133	1	10.3	.045	.05	D.
The year	2,170	1	114	0.502	6.80	
1911						
January	119	14	32.8	0.144	0.17	C.
February	1,320	4	184	.811	.84	B.
March	500	2.5	77.7	.342	.39	A.
April	1,890	20	285	1.26	1.41	B.
May	2,170	3	207	.912	1.05	B.
June	6	3	3.1	.014	.02	D.
July	3	2.5	3.0	.013	.01	D.
August	167	3	31.3	.138	.16	C.
September	523	11	114	.502	.56	B.
October	227	3.5	31.0	.137	.16	B.
November	179	5	45.9	.202	.23	A.
December	506	14	102	.450	.52	A.
The year	2,170	2.5	92.2	.406	5.52	

NOTE—Monthly discharges for 1908 are based on means for days when gage was read.

MISCELLANEOUS DISCHARGE MEASUREMENTS MADE IN UPPER MISSISSIPPI RIVER DRAINAGE BASIN IN ILLINOIS

Date	Stream	Locality	Width	Area of section	Mean velocity	Gage height	Discharge
1904			*Feet*	*Sq. ft.*	*Ft. per sec.*	*Feet*	*Sec.-ft.*
March 28	Illinois River	Havana	1,034	16,000	4.65	19.40	74,300
March 29	Illinois River	..do	1,034	16,300	4.68	19.70	76,100
April 1	Illinois River	..do	1,035	16,400	4.90	19.90	80,300
April 16	Illinois River	..do	1,035	13,800	3.58	17.20	49,500
April 18	Illinois River	..do	726	13,200	4.41	18.95	*58,100
April 25	Illinois River	..do	1,034	11,300	3.29	14.90	37,100
May 1	Illinois River	..do	1,034	11,300	3.10	14.80	34,900
1908							
March 26	Sugar Creek	Hartsburg	96	151	1.88	2.7	285
1910							
March 30	Spoon River	Seville	125	404	1.55	†	627
March 31	Spoon River	Maquon	108	313	.96	‡	302
April 1	Spoon River	Dahinda	76	215	1.09	§	235
April 1	Spoon River	Elmore	60	122	1.27	¦	155
April 2	Spoon River	Near Wyoming	64	61	1.41	‖	86
April 5	Sugar Creek	Hartsburg	40	50	1.52	‖'	76

* Channel obstructed by drift.

† 30.65 feet to water surface from top of downstream end of third floor beam from right abutment of Toledo, Peoria & Western Railroad bridge east of Seville.

‡ 25.71 feet to water surface from base of rail 135 feet from face of coping of right abutment. Downstream side of Chicago, Burlington & Quincy Railroad bridge.

§ 26.04 feet to water surface from top of handrail on downstream side of bridge, 59 feet from center of right tubular pier.

¦ 22.61 feet to water surface from top of downstream end of floor beam, 79 feet from base of left abutment. Bridge is East Bridge—above mouth of Walnut Creek.

‖ 15.26 feet to water surface from top of northeast corner of upstream end of floor beam 39 feet from face of left plank abutment.

‖' 17.55 feet to water surface from top of third floor beam left end of bridge, downstream side.

GENERAL DESCRIPTION OF OHIO RIVER DRAINAGE BASIN

The drainage basin of Ohio River lies in the central part of the eastern half of the United States. The river is formed by the union of Allegheny and Monongahela rivers at Pittsburg, Pa., and flows in a general southwesterly direction to its junction with the Mississippi at Cairo, Ill. The principal tributaries below Pittsburg from the north and west are Beaver, Muskingum, Scioto, Miami, and Wabash rivers; those from the south and east are Monongahela, Little Kanawha, Kanawha, Guyandotte, Big Sandy, Licking, Kentucky, Green, Cumberland, and Tennessee rivers. The total length of the river is 967 miles; the total drainage area is about 203,000 square miles.

The drainage basin of Ohio River comprises greater or less areas in the states of New York, Pennsylvania, Maryland, West Virginia, Virginia, North Carolina, Georgia, Alabama, Mississippi, Tennessee, Kentucky, Ohio, Indiana, and Illinois. Its northern boundaries are about 40 miles south of Buffalo, N. Y., its southern boundaries are within 300 miles of the Gulf of Mexico, and its eastern boundaries are about 225 miles from the Atlantic Ocean. The sources of the tributaries from the north lie in the glaciated area; those of the southern tributaries are located on the steep and rocky slopes of the western side of the Appalachian Mountains.

The topography of the basin varies from flat and rolling in the western and northern portions to rough and mountainous in the southern and eastern sections. In general the rock floor of the valley is 30 to 50 feet below the level of the stream at low water. It is thought

that in the whole length of the valley no rock barrier crosses its entire width at a level as high as the bed of the present stream. In several places rock shelves extend out part way across the river bed, leaving a channel deep enough for the passage of boats along the opposite bank.

Notwithstanding the great number of riffles and shoals, the Ohio is generally navigable throughout the entire season for boats drawing less than 3 feet of water. It is navigable for vessels drawing 6 feet of water during a few months of the early part of the season, but there is usually little traffic with such boats after July. The canal at Louisville affords opportunity for passing around the rapids during low water. During high water stages the boats are able to pass over the rapids.

The narrowness of the valley of Ohio River has been a subject of remark from the early days of settlement. At very few places between Pittsburg and Louisville does its width exceed 2 miles, and usually it is scarcely more than 1 mile wide. In the vicinity of Louisville its width is perhaps 4 miles, but below the mouth of Salt River it narrows abruptly to about 1 mile, and remains narrow for nearly 100 miles. Beyond this narrow stretch it broadens out to a width of 6 or 8 miles, which it maintains for much of its course to Cairo, the only exception as it passes the elevated ridge below Shawneetown, where its width is reduced to about 2½ miles.

The depth of the valley ranges from about 600 feet down to scarcely 100 feet, being greatest on the border of the "panhandle" of West Virginia and least in the lower portion of its course. Its depth seldom falls below 300 feet in the portion above Louisville and probably averages 450 feet. The narrow portion below Louisville is about 300 feet deep. The broad portions at Louisville and in the lower parts of its course are but 100 to 150 feet deep.

The average width between banks does not increase materially from Pittsburg to Cincinnati. In the long pool above the falls of the Ohio at Louisville the average width is much greater than that above Cincinnati, while just below the falls there is a considerable narrowing. Below this, the average width continues to increase toward the mouth of the river. The maximum width between banks is found about 20 miles above the mouth, where it is considerably more than a mile. There are many islands in the river—more than fifty above Louisville and about thirty below—ranging in size from a few acres to 5,000 acres. Many of them are cultivated and all are practically permanent in position.

The elevation of normal low water at Davis Island Dam at Pittsburg is 692 feet, and low water elevation at Cairo is 273 feet, a total fall of 419 feet, or an average fall of about 0.43 foot to the mile. The average fall of the portion of the river along the southern boundary of the State of Illinois is 0.32 foot to the mile. For list of elevations see tables of profiles.

The northern and western portions of the drainage basin is deforested; the southern and eastern portions may be called partly forested, as large areas in the Appalachian Mountains at the sources of some of the southern tributaries are still covered with a heavy growth of

trees; as the tributaries are descended the cleared areas increase until the forested area is small.

The mean annual rainfall in the basin is about 45 inches, ranging from 35 inches along its northern boundary to 70 inches in the southeastern part at the sources of Tennessee River. The winters in general are mild; ice does not form very thick—on some tributaries hardly at all; the snowfall is light and does not last long. In the region about the headwaters of Allegheny River, however, the winters are severe.

In quantity of discharge Ohio River is the main tributary of the Mississippi. Its mean annual discharge is about 300,000 cubic feet per second, which is much more than the discharge of St. Lawrence River at Ogdensburg, N. Y., although the drainage area of the St. Lawrence is nearly twice that of the Ohio. The maximum flow of the Ohio is approximately 1,500,000 cubic feet per second—about thirty times the low water flow. A comparison of records of flow of Ohio River with those of the upper Mississippi and Missouri shows that although its drainage area is one-third that of the combined Mississippi and Missouri its mean and low water flow is 1.3 times as great as their combined flow, and its maximum flow is 1.5 times as great. This fact is accounted for by the greater rainfall in the Ohio basin and by the character of the basin.

From the mouth of the Wabash River to the Mississippi River, a distance of 128 miles, the Ohio River forms the southern boundary of the State of Illinois.

The drainage area of the Ohio River within the State of Illinois is 11,500 square miles.

The following list includes the gaging stations on the portion of the Ohio River which forms the southern boundary of the State, and on the portion of the Wabash River along the eastern boundary of the State maintained by the Army Engineers and the United States Weather Bureau. Information with reference to these stations may be obtained upon application to the Chief of Engineers, United States Army, Washington, D. C., or to the United States Weather Bureau, Washington, D. C.

Following the above list of gaging stations are those stations for which data are published in this report:

OHIO RIVER

Station	Distance above mouth	Period covered by record	Elevation of zero of gage above sea level	Maximum gage reading	Minimum gage reading	Maintained or published by—
	Miles	*Years*	*Feet*	*Feet*	*Feet*	
Shawneetown	119	1893–1901; 1910–11	309.7	56.4	0.0	U. S. Weather Bureau
Paducah, Ky	47	1873–1911	286.3	54.2	—0.7	do
Cairo	1	1871–1911	270.9	52.2	—1.0	do

WABASH RIVER

Station	Distance above mouth	Period covered by record	Elevation of zero of gage above sea level	Maximum gage reading	Minimum gage reading	Maintained or published by—
	Miles	*Years*	*Feet*	*Feet*	*Feet*	
Grand Rapids Lock, upper gage	96	1899–1911	.....	20.2	5.0	U. S. Engineers
Grand Rapids Lock, lower gage	96	1899–1911	.....	29.8	3.2	do
Mt. Carmel	75	1884–1911	373.0	28.3	—0.2	U. S. Engineers; U. S. Weather Bureau

LIST OF GAGING STATIONS IN THE OHIO RIVER BASIN, DATA FROM WHICH ARE PUBLISHED IN THIS REPORT

Wabash River at Mt. Carmel, Ill., 1884-1911, (gage height records by United States Weather Bureau).
Embarrass River near Oakland, Ill., 1908-11.
Embarrass River at St. Marie, Ill., 1908-11.
Little Wabash River near Clay City, Ill., 1908-11.
Little Wabash River near Golden Gate, Ill., 1908-11.
Little Wabash River at Carmi, Ill., 1908-11.
Skillet Fork River near Wayne City, Ill., 1908-11.
Skillet Fork River near Mill Shoals, Ill., 1908-11.

WABASH RIVER DRAINAGE BASIN

DESCRIPTION

The drainage area of Wabash River lies in Ohio, Illinois, and Indiana, slightly more than two-thirds of the area being in the last-named state.

The Wabash rises in the southwestern part of Mercer County, Ohio, flows northwestward across the Indiana state line to Huntington in Huntington County, and thence slightly southwestward to Logansport in Cass County. At Logansport the river turns more to the southwest until it reaches Covington in Fountain County, where it finally turns south, continuing in this direction to Terre Haute, below which its course is slightly southwestward to its junction with Ohio River about 30 miles below Mount Vernon, Ind. From a point about 15 miles below Terre Haute to the mouth it forms the boundary line between Indiana and Illinois.

The important tributaries, beginning at the sources and following down the left bank, are Salamonie and Mississinewa rivers, Wild Cat, Sugar, and Raccoon creeks, and White and Patoka rivers; on the right bank are Little, Eel, Tippecanoe, Vermilion, Embarrass, Little Wabash, and Saline rivers. White River is much the largest tributary. The

length of the Wabash is about 410 miles (map measurement), and its drainage area comprises approximately 33,000 square miles; the area in Illinois is 8,770 square miles.

The basin is regular in shape. Only a small part of the entire drainage area lies outside the glaciated region. The Wabash and the West Branch of the White lie within that area for their entire length. The East Branch of the White leaves the glaciated area in the lower part of its course, and enters it again about 20 miles above its mouth. All the rock formations are more or less covered with glacial drift in the form of sand and gravel ridges and till plains. In general the surface of the country is flat, with a general slope toward the southwest. In the unglaciated section in southern Indiana the country is more uneven. Rock outcrops at many places in the bed of the main stream and its tributaries.

Along Little Wabash River, which enters the Wabash about 15 miles above its mouth, drainage and flood control are subjects of considerable interest. The Department of Agriculture is making a study of conditions with a view to developing a plan for reclaiming and protecting areas that are overflowed during floods. Portions of the river have already been mapped for use in this study.

The elevation of the sources of Wabash River is about 1,000 feet; at Huntington the elevation is 699 feet; at Logansport it is 583 feet; at Terre Haute, 478 feet; at the mouth of White River, 376 feet; at the mouth, 311 feet.

The basin is thickly settled and highly cultivated, and the timber standing comprises only groves and woodlots, generally of small extent.

The mean annual rainfall is about 40 inches. The winters in the northern part of the basin are comparatively severe. The snowfall is not heavy, but ice forms on the streams about 1 foot in thickness; in the lower part of the basin the winters are mild and ice does not form very thick.

The high value of farm land in this section would undoubtedly prohibit the construction of reservoirs for storage.

The main stream and its tributaries afford good opportunities for water power, especially the East and West branches of the White, where the fall is much more than on the Wabash. In general, the water power is not being developed.

At the headwaters of Wabash River, in Mercer County, Ohio, is a large reservoir, called Grand Reservoir, that is used to store water which is supplied to the Miami and Erie Canal. This reservoir receives the drainage from about 200 square miles, and its capacity is about 4,000,000,000 cubic feet. The water that is thus fed to the canal is diverted from the basin of the Wabash River.

The Wabash is navigable for part of its length.

WABASH RIVER AT MT. CARMEL, ILLINOIS

Location.—At Southern Railroad Bridge at Mt. Carmel, Ill., 1½ mile below mouth of White River and immediately below mouth of Patoka River.

Records available.—(United States Army Engineers), June 16, 1884, to November, 1904; (United States Weather Bureau), November, 1904, to December 31, 1911.

Drainage area.—Not measured.

Gage.—Staff gage attached to pivot pier of drawspan. Gage datum has remained unchanged since it was established in 1884.

Channel.—Slightly shifting.

Discharge measurements.—Made from downstream side of bridge. There are numerous overflow openings in the railroad embankment east of the railroad bridge.

Floods.—Maximum stage 28.3 feet August 7, 1875.

Winter flow.—The relation of gage height to discharge may be affected by ice for a week or so at a time during December, January, and February.

Regulation.—None.

DISCHARGE MEASUREMENTS OF WABASH RIVER AT MT. CARMEL, ILLINOIS, 1908–11

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet	*Sq.-ft.*	*Feet*	*Sec.-ft.*
1908					
October 10	O'Neill & Chapman	772	5,400	1.15	2,620
1909					
March 9	W. M. O'Neill	1,437	19,200	13.92	53,600
April 30	Jackson & Chapman	1,210	13,400	9.18	35,200
May 24	Jackson & Chapman	979	9,910	6.33	21,300
1910					
January 29	H. J. Jackson	1,966	28,200	13.86	77,100
March 23	M. E. McChristie	975	8,870	5.40	16,700
November 11	C. T. Bailey	813	6,620	2.50	7,060

DAILY GAGE HEIGHT, IN FEET, OF WABASH RIVER AT MOUNT CARMEL, ILLINOIS, FOR 1908–11

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1	14.9	5.4	19.7	13.4	11.4	8.0	3.5	2.3	0.8	1.1	1.0	1.6
2	15.1	.....	19.4	14.3	11.4	7.8	3.3	2.2	.8	1.1	1.0	1.7
3	15.2	.....	19.2	15.4	11.1	7.0	3.1	2.2	.7	1.1	.8	1.7
4	15.4	.....	19.2	16.3	10.6	6.5	3.1	2.2	.7	1.1	.8	1.7
5	15.5	.....	19.3	16.4	12.4	6.5	3.1	2.2	.7	1.1	.8	1.6
6	15.3	7.9	19.3	16.5	16.7	6.2	3.1	2.1	.6	1.1	.8	1.6
7	14.9	12.1	19.7	16.1	18.9	6.0	3.1	2.0	.5	1.0	.8	1.6
8	13.9	13.4	20.1	16.0	20.5	5.8	3.1	1.9	.5	1.0	.8	1.6
9	13.8	14.7	20.8	16.6	22.3	5.6	3.1	1.9	.4	1.0	.8	1.6
10	13.0	15.1	21.4	17.0	23.5	5.6	3.1	1.9	.4	.9	.8	1.6
11	10.5	15.6	22.0	17.4	24.5	5.5	3.1	1.8	.4	.9	.8	1.6
12	9.5	15.6	22.6	17.7	24.8	5.3	3.1	1.7	.3	.9	.8	1.6
13	8.8	15.5	22.9	18.0	24.9	5.1	3.1	1.6	.8	.9	.8	1.5
14	10.6	16.1	23.3	18.3	24.7	4.9	3.0	1.6	1.2	.8	.8	1.5
15	12.0	18.1	23.5	18.5	24.5	4.7	2.9	3.1	1.3	.8	.8	1.5
16	12.9	19.6	23.4	18.5	24.0	4.5	2.7	2.6	1.3	.8	.8	1.5
17	13.3	20.1	22.9	18.0	23.7	4.4	2.5	2.6	1.2	.8	.8	1.5
18	13.4	20.8	22.2	16.8	22.9	4.3	2.4	3.2	1.1	.8	.8	1.4
19	12.2	21.5	21.3	15.3	21.9	4.2	2.3	3.0	1.1	.8	.8	1.4
20	10.9	22.0	20.3	13.6	21.0	4.1	2.2	3.0	1.0	.8	.8	1.4
21	9.1	22.2	19.0	12.0	20.0	4.0	2.1	2.3	1.0	.8	.8	1.4
22	8.2	22.6	18.0	11.1	19.3	3.9	2.3	2.0	.9	.8	.8	1.4
23	7.7	22.9	17.0	10.2	18.6	4.5	2.4	2.0	.8	.8	.8	1.4
24	7.2	23.2	16.6	9.2	17.9	4.4	2.4	1.9	.8	.8	.8	1.4
25	6.8	23.1	16.4	9.1	17.1	4.2	2.3	1.8	.8	.8	.8	1.4
26	6.4	22.8	16.3	10.2	16.4	4.2	2.3	1.6	.8	.8	.8	1.4
27	6.0	22.0	16.0	10.7	15.2	4.1	2.3	1.5	.8	.8	.8	1.4
28	5.7	21.1	15.2	11.5	13.8	4.0	2.4	1.2	.9	.8	1.0	1.4
29	5.6	20.3	14.8	11.8	11.3	3.9	2.8	1.1	1.0	.8	1.2	1.4
30	5.5	.....	14.1	11.4	9.4	3.7	2.6	1.0	1.1	.8	1.4	1.4
31	5.4	.....	13.4	.....	8.7	.....	2.3	.9	.....	.8	.....	1.4

DAILY GAGE HEIGHT, IN FEET, OF WABASH RIVER AT MT. CARMEL, ILLINOIS, FOR 1908-11—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
1	1.4	.....	18.6	6.7	10.6	12.5	11.2	3.8	2.7	3.4	4.0	7.0
2	1.4	.....	19.1	6.4	12.0	12.3	10.2	3.7	2.7	3.0	3.8	6.1
3	1.4	.....	19.4	6.0	12.8	12.2	9.3	4.0	2.7	2.8	3.5	5.8
4	1.4	.....	19.7	5.7	13.0	11.9	8.1	4.2	2.6	2.6	3.3	5.3
5	1.4	.....	19.5	5.7	13.1	12.0	6.9	4.5	2.6	2.5	3.0	5.2
6	1.4	1.7	18.3	5.5	13.1	12.4	5.9	4.6	2.6	2.5	2.8	5.1
7	1.4	2.3	16.8	5.2	13.2	12.9	6.3	4.4	2.5	2.4	2.6	5.1
8	1.4	2.5	14.7	7.0	13.0	13.4	9.1	4.0	2.5	2.4	2.5	5.0
9	1.4	2.8	13.2	10.1	12.6	13.7	11.8	3.8	2.5	2.3	2.4	5.2
10	1.4	2.9	15.9	11.9	12.1	13.5	11.3	3.6	2.4	2.3	2.4	5.4
11	1.4	3.0	17.4	12.9	12.1	13.1	10.2	3.5	2.4	2.2	2.4	5.0
12	1.4	3.0	18.1	13.4	12.3	13.1	9.3	3.4	2.4	2.2	2.3	4.7
13	.....	4.0	18.3	14.1	13.0	13.3	10.2	3.3	2.4	2.1	2.1	4.7
14	.....	5.0	18.3	14.2	13.6	13.1	12.7	3.2	2.3	2.0	2.1	10.1
15	.....	5.7	18.4	13.9	13.8	13.3	15.0	3.2	2.3	1.9	2.1	12.5
16	.....	7.8	18.6	13.7	13.4	13.2	15.9	3.3	2.2	1.8	2.1	13.3
17	.....	9.5	18.4	13.6	12.8	13.4	16.0	3.8	2.2	1.8	2.3	14.2
18	.....	9.8	17.6	13.3	11.6	13.0	15.2	4.0	2.2	1.9	2.9	.....
19	.....	9.7	15.0	13.0	10.2	12.1	14.4	3.9	2.2	2.0	3.2	.....
20	.....	10.6	11.3	12.4	9.9	11.3	13.1	3.7	2.2	2.0	3.4	.....
21	1.4	11.8	9.3	12.5	9.2	10.2	12.0	3.5	2.1	2.1	3.8	.....
22	1.4	12.7	8.3	12.6	8.1	9.0	11.0	3.4	2.2	2.3	4.3	.....
23	1.4	13.6	7.5	12.8	7.3	7.8	10.9	3.3	2.3	3.0	4.3	.....
24	1.4	15.4	6.9	13.2	6.8	7.3	9.0	3.2	2.3	3.0	4.9	6.0
25	1.4	16.5	6.5	13.0	6.5	6.5	7.6	3.1	2.2	3.0	6.3	.....
26	1.5	17.2	6.1	12.3	6.0	6.0	6.5	3.0	2.2	3.2	7.8	.....
27	1.5	17.8	5.8	11.9	6.0	6.9	5.4	2.9	2.1	3.4	9.0	.....
28	1.5	18.2	5.7	10.0	7.8	9.1	4.5	2.8	3.1	4.1	9.8	.....
29	1.6	.....	6.0	9.1	9.2	10.7	4.0	2.8	4.0	4.3	10.0	.....
30	.....	.....	6.3	9.0	11.3	11.6	4.0	2.8	4.0	4.5	9.6	.....
31	.....	.....	7.0	.....	12.2	.....	4.0	2.8	.....	4.2	.....	.....
1910												
1	.....	13.8	16.1	4.3	5.5	4.9	3.7	7.8	1.8	1.8	3.2	6.4
2	5.0	11.0	17.3	4.2	5.4	4.7	3.9	6.5	1.7	1.8	3.1	5.9
3	5.0	9.9	18.1	4.0	5.5	4.3	3.2	5.7	1.7	1.7	3.0	5.3
4	.....	8.6	18.8	3.9	5.8	4.1	3.3	4.9	2.5	2.0	2.9	5.3
5	.....	7.6	19.4	3.8	7.1	3.9	3.8	4.2	3.6	4.4	2.8	5.2
6	.....	7.5	20.2	3.8	7.3	3.8	4.5	4.0	5.2	10.5	2.8	5.0
7	.....	7.4	21.1	3.7	7.4	3.7	4.8	3.6	5.6	15.2	2.8	4.5
8	.....	7.1	21.7	3.7	7.6	3.6	5.1	3.2	6.6	16.2	2.7	4.0
9	11.4	7.3	21.9	3.6	7.7	3.5	4.8	2.8	8.2	15.9	2.7	3.6
10	.....	7.0	21.7	3.6	7.7	3.3	4.4	2.6	7.2	16.0	2.6	3.3
11	.....	6.4	21.0	3.6	7.6	3.2	5.1	2.5	7.1	16.2	2.6	3.1
12	.....	6.0	19.1	3.6	7.5	3.0	4.9	2.4	6.7	16.9	2.5	3.0
13	.....	5.5	15.5	3.6	7.7	2.9	4.9	2.3	5.8	17.4	2.5	3.0
14	11.9	5.2	12.1	3.6	7.9	2.8	5.5	2.2	5.0	17.7	2.4	2.9
15	11.8	5.0	9.7	3.6	7.6	2.8	5.5	2.1	4.6	17.5	2.4	2.7
16	13.2	4.8	8.5	3.6	7.1	2.8	5.2	2.0	4.2	17.1	2.3	2.5
17	13.8	4.8	6.8	4.1	6.2	2.7	7.7	2.0	4.0	16.2	2.2	2.4
18	15.8	4.8	6.2	5.0	5.6	2.6	12.1	1.9	3.6	14.4	2.2	2.4
19	17.1	.....	6.0	5.7	5.1	2.5	12.8	1.9	3.2	10.7	2.2	2.4
20	17.7	5.0	6.0	6.2	4.8	2.4	12.5	1.9	3.0	7.7	2.1	2.3
21	18.3	5.3	5.9	6.8	4.7	2.3	12.3	1.9	2.8	6.5	2.1	2.2
22	18.9	7.0	5.6	7.0	4.6	2.2	12.5	2.0	2.6	5.7	2.0	2.2
23	19.8	9.0	5.4	6.8	4.6	2.0	12.4	2.1	2.4	5.4	2.0	2.2
24	20.3	10.2	5.1	7.0	5.0	1.8	12.2	2.2	2.2	5.2	2.0	2.2
25	20.7	10.1	4.9	7.2	6.2	1.7	12.1	2.0	2.1	5.0	2.0	2.2
26	21.0	10.1	4.9	7.5	7.3	1.6	9.1	1.9	2.0	4.8	2.0	2.2
27	21.0	11.5	4.9	6.7	7.6	1.5	7.2	1.8	2.0	4.6	2.0	2.2
28	20.5	13.8	4.8	6.1	7.6	1.4	5.5	1.8	1.9	4.3	2.2	2.2
29	19.4	.....	4.6	5.8	7.0	1.4	5.9	1.7	1.8	4.0	5.1	2.3
30	17.9	.....	4.4	5.5	5.9	2.5	7.2	1.7	1.8	3.7	6.4	2.5
31	16.4	.....	4.3	.....	5.2	.....	9.3	1.7	.....	3.4	.....	4.0
1911												
1	10.2	15.3	9.7	6.9	10.8	3.4	2.7	0.8	1.0	12.2	4.1	7.5
2	11.6	16.1	9.3	6.9	11.3	3.3	3.0	0.8	1.0	12.2	4.0	7.3
3	13.0	16.4	8.8	6.9	11.4	3.2	3.2	0.8	1.0	13.5	3.8	7.1
4	14.0	16.7	8.0	6.8	11.6	3.1	3.0	0.8	1.0	14.2	3.6	7.0
5	13.6	16.6	7.1	9.4	11.8	3.0	2.7	0.8	1.0	14.6	3.5	7.0
6	12.0	15.7	6.6	12.3	11.3	3.0	2.5	0.8	1.7	14.6	3.5	6.8
7	10.4	13.4	6.2	13.6	10.6	3.1	2.4	0.8	2.2	14.5	3.6	6.2
8	8.6	11.5	6.1	14.4	10.0	3.2	2.2	1.0	2.2	13.7	4.2	5.4
9	7.6	10.7	10.6	15.2	9.2	3.3	2.1	1.3	1.8	12.4	4.8	5.0
10	6.6	10.2	11.9	15.7	8.0	3.3	2.0	1.5	1.7	11.2	5.0	4.8
11	6.0	9.7	12.2	16.1	7.6	3.4	1.9	1.4	1.7	9.8	5.0	4.8
12	5.6	8.8	12.4	16.0	6.8	3.5	1.9	1.4	2.6	9.0	5.0	7.2
13	6.3	7.9	12.3	15.2	5.9	3.4	1.9	1.4	3.1	8.2	5.0	9.5

DAILY GAGE HEIGHT, IN FEET, OF WABASH RIVER AT MT. CARMEL, ILLINOIS, FOR 1908-11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1911												
14	7.2	7.2	11.6	15.4	5.5	3.3	1.8	1.3	3.4	7.2	5.9	11.0
15	10.0	6.8	10.7	16.4	5.2	3.1	1.7	1.3	4.4	6.2	6.4	11.8
16	12.1	6.5	10.0	17.3	4.8	2.8	1.6	1.3	4.6	5.3	7.3	12.4
17	13.4	6.7	9.0	17.9	4.5	2.6	1.5	1.3	5.7	4.9	7.7	13.7
18	14.3	8.1	7.9	18.3	4.3	2.4	1.4	1.3	6.2	4.5	7.7	14.0
19	14.6	10.6	6.6	18.5	4.1	2.4	1.4	1.2	7.9	4.4	9.0	13.7
20	14.2	12.3	6.0	18.8	3.9	3.5	1.4	1.2	9.0	4.8	9.6	12.8
21	12.8	13.3	5.9	19.3	3.9	4.6	1.4	1.2	9.5	5.0	10.2	12.2
22	10.8	13.4	5.7	19.6	3.9	4.2	1.4	1.2	8.0	5.8	11.1	11.8
23	9.6	13.5	5.5	19.4	4.0	3.8	1.3	1.5	6.2	6.1	11.4	10.0
24	9.3	13.1	5.4	18.9	4.2	3.3	1.3	1.6	4.9	5.5	11.6	9.6
25	9.4	12.3	5.3	18.4	4.5	3.0	1.3	1.6	4.4	5.2	11.3	9.3
26	9.4	11.3	5.1	16.8	4.8	3.0	1.2	1.4	4.3	5.5	9.8	9.0
27	9.0	10.7	4.9	14.7	4.6	3.1	1.1	1.3	4.3	5.5	8.5	8.6
28	9.3	10.2	4.8	12.4	4.3	3.2	1.0	1.2	4.4	4.9	8.0	8.3
29	11.0	.....	5.0	10.5	4.0	3.0	0.9	1.1	5.4	4.7	7.7	7.9
30	13.0	.....	5.8	9.8	3.7	2.7	0.9	1.0	9.0	4.5	7.6	7.6
31	14.2	.....	6.6	.....	3.5	.....	0.8	1.0	.....	4.3	.....	7.7

NOTE—River frozen February 2-5, 1908, January 13-20, February 1-5, December 18-23, 25-31, 1909, January 1, 4-8, 10-13 and February 19, 1910.

EMBARRASS RIVER DRAINAGE BASIN

DESCRIPTION

The drainage area of Embarrass River lies in the southeastern portion of the State of Illinois.

The river rises in the central part of Champaign County, near Urbana, flows in a southerly direction through Douglas, Coles, and Cumberland counties to the center of Jasper County, whence it takes an extremely tortuous but in general southeasterly course across Jasper County, the southwestern corner of Crawford County, and Lawrence County to its junction with Wabash River, about midway between Vincennes, Ind., and St. Francisville, Ill. Exclusive of the bends, its length is about 125 miles, and its drainage area comprises 2,410 square miles. Its most important tributary is Hickory Creek, or North Fork Creek, which enters from the left bank about 2½ miles below St. Marie, Ill. The sources of the river are about 730 feet and the mouth about 400 feet above sea level.

The basin is long and narrow, with a length of about 100 miles and a fairly uniform width ranging from 15 to 30 miles. The surrounding country, which is level or gently rolling, is diversified by some small hills along the river. In the lower part of the basin, in the vicinity of St. Marie, the soil is sandy along the river; farther north and west it is the familiar black loam. To the east the soil is a light colored clay, which was formerly covered with a heavy growth of "water oak." Near Oakland, in the upper part of the area, a sandy red soil occurs near the river and black loam away from the river. A mile back from the river on either side is prairie country.

In the southwestern part of the basin, west of Lawrenceville, there are extensive oil fields.

The chief crop in the valley of the Embarrass is corn. Some wheat is also grown. Forested areas are lacking in this basin.

The mean annual rainfall is about 40 inches. The winters are, as a rule, mild, the snowfall extending over a period of about two months and lasting only a few days at a time. For about a month ice in the river is 3 or 4 inches thick. During periods of extreme drought there is little flow in the river, for there are no springs in the basin and the ground-water storage is insufficient to maintain the low-water flow. In wet seasons the ground becomes saturated, and heavy rains reach the river too rapidly for the streams to care for them. Large areas of bottom land throughout the entire length of the river are inundated by the floods, which cause a great amount of damage. Land drainage and flood control are therefore subjects of much importance and are now under investigation. Little drainage work has been done in the uplands, but the bottoms have been drained to some extent. No water power sites are available in this basin. The question of storage has not been studied.

EMBARRASS RIVER NEAR OAKLAND, ILLINOIS

Location.—At highway bridge about 2 miles northwest of Oakland, Ill., on the county line road to Hindsboro and Arcola, in the northeast part of T. 14 N., R. 10 E., about 5 miles below the mouth of Brush Creek.

Records available.—October 23, 1909, to December 31, 1911.

Drainage area.—Five hundred and thirty-five square miles.

Gage.—Standard chain gage attached to bridge; datum unchanged since date of establishment.

Channel.—The section is at a pool; measurements to date indicate that the control has not changed.

Discharge measurements.—Made from downstream side of bridge.

Floods.—The flood of 1897 reached a height of about 24 feet by the present gage datum.

Point of zero flow.—Has not been determined. There was no flow past the bridge during a portion of the summer of 1908.

Winter flow.—Ice may affect the relation of gage height to discharge during portions of December, January, and February.

DISCHARGE MEASUREMENTS OF EMBARRAS RIVER NEAR OAKLAND, ILLINOIS, IN 1909–11

Date		Hydrographer	Width	Area of section	Gage height	Discharge
1909			*Feet*	*Sq.-ft.*	*Feet*	*Sec.-ft.*
October	22	H. J. Jackson	87	165	2.36	24
October	25	H. J. Jackson	90	237	3.20	76
December	8	H. J. Jackson	92	276	3.70	126
1910						
March	8	M. E. McChristie	119	628	7.11	792
March	12	M. E. McChristie	105	426	5.44	440
March	12	M. E. McChristie	105	430	5.46	419
March	26	H. J. Jackson	160	894	9.02	1,230
July	21	Jackson and Hanson	98	367	4.85	280
1911						
October	6	Monk and Brown	163	917	9.37	1,360

DAILY GAGE HEIGHT, IN FEET, OF EMBARRASS RIVER NEAR OAKLAND, ILLINOIS, FOR 1909–11

[A. J. McDaniels, observer]

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.4	3.95
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.45	3.8
3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.6	3.85
4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.6	3.75
5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.55	3.7
6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.5	3.9
7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.45	3.7
8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.6	3.7
9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.65	3.8
10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.55	3.85
11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.5	3.95
12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.5	4.0
13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.45	7.5
14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.5	8.7
15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.55	8.65
16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.8	7.9
17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.6	6.8
18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.0	6.2
19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.55	6.0
20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.1	5.75
21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.0	5.65
22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.9	5.4
23	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.85	6.7	5.2
24	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.2	6.6	5.15
25	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.2	6.4	5.1
26	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.1	5.85	5.1
27	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.9	4.65	5.0
28	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.65	4.3	4.9
29	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.6	3.9	4.5
30	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.45	3.85	4.4
31	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.3	.....	4.25
1910												
1	4.7	4.7	13.0	3.35	4.75	5.1	4.35	5.6	1.9	3.1	2.7	3.55
2	4.9	4.8	12.5	3.45	5.0	4.8	3.5	5.05	1.9	2.95	2.7	3.7
3	5.85	5.1	10.5	3.35	5.25	4.6	4.65	4.2	1.95	2.9	2.75	3.8
4	5.9	5.0	10.0	3.3	6.2	4.5	4.95	3.45	1.95	4.0	2.65	3.95
5	5.8	4.95	9.2	3.25	5.65	4.4	5.0	3.0	2.8	5.85	2.65	3.8
6	5.85	4.9	8.4	3.2	5.45	4.3	5.55	2.8	3.95	6.6	2.6	3.7
7	5.6	4.65	7.3	3.15	5.25	4.1	5.9	2.75	4.4	6.55	2.6	3.7
8	5.4	4.6	6.9	3.2	5.2	4.0	5.05	2.6	4.95	6.4	2.7	3.5
9	5.0	4.5	6.1	3.25	6.95	3.9	4.75	2.55	4.5	6.15	2.65	3.35
10	4.6	4.45	5.8	3.25	6.8	3.8	4.0	2.45	4.3	5.8	2.75	3.2
11	4.4	4.2	5.55	3.25	6.8	3.75	3.05	2.4	4.15	5.6	2.75	3.2
12	5.2	4.0	5.4	3.3	7.7	3.5	3.4	2.35	4.0	5.55	2.75	3.25
13	10.55	4.0	5.2	3.35	7.7	3.4	4.25	2.25	3.9	5.3	2.75	3.15
14	14.15	3.95	5.15	3.4	7.6	3.35	3.9	2.35	3.7	5.05	2.65	3.2
15	15.0	3.95	4.9	3.45	7.3	3.3	3.6	2.3	3.4	4.8	2.65	3.1
16	13.5	3.9	4.8	3.5	6.25	3.2	9.9	2.6	3.05	4.5	2.55	3.0
17	11.2	3.85	4.7	3.9	5.8	3.1	9.0	2.55	2.75	3.95	2.4	3.05
18	12.5	3.85	4.5	4.05	5.15	3.0	8.55	2.45	2.75	3.8	2.4	2.9
19	13.5	3.9	4.3	4.0	5.0	2.8	7.95	2.35	2.65	3.55	2.3	2.85
20	12.4	3.8	4.25	4.0	4.8	2.75	6.25	2.15	2.55	3.3	2.25	2.9
21	10.45	3.9	4.2	3.9	4.45	2.7	5.6	2.1	2.55	3.1	2.2	2.8
22	9.0	4.1	4.15	3.9	4.2	2.55	5.15	2.15	2.5	3.05	2.25	2.75
23	7.6	4.2	4.1	3.9	7.9	2.55	4.5	2.05	2.85	2.9	2.3	2.7
24	6.2	3.9	4.0	3.9	9.1	2.5	3.9	2.1	2.95	2.9	2.2	2.65
25	6.0	4.1	3.95	3.95	9.5	2.4	3.55	2.0	2.95	2.85	2.25	2.7
26	5.8	4.2	3.95	4.2	8.55	2.3	3.2	2.0	2.95	2.8	2.2	2.6
27	5.6	5.0	3.9	4.2	7.1	3.5	3.15	1.95	3.2	2.8	2.3	2.65
28	5.3	9.0	3.85	4.2	6.1	4.7	3.6	1.9	3.3	2.7	2.75	2.55
29	5.1	.....	3.7	4.4	5.8	5.0	5.8	1.9	3.2	2.7	2.8	2.7
30	5.05	.....	3.55	4.5	5.6	5.1	6.35	1.85	3.1	2.6	3.0	2.95
31	4.8	.....	3.4	.....	5.5	.....	6.0	1.8	.....	2.6	.....	3.9
1911												
1	2.9	11.0	5.1	5.0	5.4	2.75	2.9	1.7	1.7	14.75	6.5	5.8
2	3.2	10.9	4.8	4.9	5.35	2.7	2.2	1.75	1.7	13.9	5.5	5.7
3	3.6	10.5	4.5	5.5	5.3	2.7	2.2	1.8	1.7	12.6	5.1	5.4
4	3.4	10.4	4.3	5.0	5.0	4.4	2.2	1.85	1.85	11.45	4.9	5.2
5	3.2	9.7	4.1	7.0	4.8	6.65	2.1	1.85	1.85	10.6	4.5	5.0
6	2.9	9.4	4.1	8.8	4.4	6.3	2.1	1.8	1.95	9.75	4.6	4.9
7	2.8	9.0	4.4	10.4	4.0	5.9	2.1	1.8	2.4	10.8	5.0	4.9
8	2.8	8.6	4.8	9.8	4.0	4.5	2.1	1.75	2.8	10.95	5.3	5.7
9	2.75	8.0	4.8	8.2	4.0	4.6	2.1	1.75	2.7	9.8	5.5	5.8
10	2.75	7.4	4.9	7.1	3.9	3.9	2.1	1.7	2.8	9.4	5.5	5.8
11	2.7	6.1	5.1	7.0	3.6	3.6	2.0	1.7	2.9	8.9	6.0	5.9

DAILY GAGE HEIGHT, IN FEET, OF EMBARRASS RIVER NEAR OAKLAND, ILLINOIS, FOR 1909–11—*Concluded*

Day	Jan.	eb.	Mar.	Apr.	May	June	July	Aug	Sept.	Oct.	Nov.	Dec.
1911												
12	2.9	5.1	5.2	7.0	3.4	3.1	2.0	1.65	3.2	8.2	7.0	5.9
13	3.4	5.5	5.2	9.7	3.2	2.95	2.0	1.65	3.7	7.5	8.3	5.8
14	3.9	5.9	5.1	13.5	3.1	2.95	1.9	1.6	4.1	7.0	9.0	5.6
15	4.0	6.1	4.9	13.4	3.0	2.9	1.9	1.6	4.9	6.2	8.3	5.4
16	4.5	6.3	4.8	13.0	2.9	2.8	1.9	1.6	5.5	5.3	8.0	5.3
17	4.7	6.8	4.7	12.4	2.9	2.7	1.9	1.6	5.8	5.5	7.8	5.4
18	5.6	7.4	4.6	11.8	2.8	2.6	1.9	1.6	6.4	5.6	8.0	5.6
19	5.8	7.8	4.5	9.2	2.9	2.6	1.9	1.55	6.2	6.7	8.4	5.6
20	5.85	7.6	4.4	8.4	2.9	2.5	1.8	1.55	6.0	8.3	7.8	6.0
21	5.8	7.4	4.3	8.0	3.2	2.5	1.8	1.5	5.9	9.7	7.6	6.4
22	5.7	7.1	4.2	7.1	3.5	2.6	1.8	1.6	5.8	10.0	8.3	6.6
23	5.9	6.4	4.15	7.0	3.4	2.6	1.8	1.6	5.7	10.7	9.0	6.5
24	6.9	6.1	4.1	6.8	3.4	2.65	1.8	1.7	4.95	11.2	8.3	6.4
25	8.8	5.9	4.0	6.7	3.3	2.75	1.7	1.75	5.4	10.3	7.3	6.4
26	9.0	5.8	4.3	6.3	3.1	2.75	1.7	1.8	8.6	9.4	6.0	6.2
27	9.5	5.5	4.6	6.0	3.0	2.9	1.75	1.8	10.9	8.0	5.7	6.4
28	10.5	5.3	4.8	5.9	3.0	3.1	1.75	1.85	13.6	7.3	5.9	6.0
29	11.1	.....	5.2	5.6	2.9	3.1	1.7	1.8	.....	7.0	5.9	5.8
30	11.2	.....	5.1	5.4	2.8	3.0	1.7	1.8	15.2	7.5	5.8	5.8
31	11.1	.....	5.1	.....	2.75	.....	1.7	1.75	.....	7.3	.....	5.9

NOTE—Ice conditions existed December 7 to 31, 1909, January 1 to 11, February 17 to 21, and December 11 to 31, 1910. Gage read to top of ice December 26 to 31, 1910, and January 4 to 7, 1911.

RATING TABLE FOR EMBARRASS RIVER, NEAR OAKLAND, ILLINOIS, FROM OCTOBER 23, 1909, TO DECEMBER 31, 1911

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
2.00	10	5.30	396	8.60	1,159	11.90	2,262
2.10	13	5.40	416	8.70	1,186	12.00	2,300
2.20	17	5.50	436	8.80	1,214	12.10	2,340
2.30	22	5.60	456	8.90	1,242	12.20	2,380
2.40	27	5.70	477	9.00	1,270	12.30	2,420
2.50	32	5.80	498	9.10	1,299	12.40	2,461
2.60	37	5.90	519	9.20	1,328	12.50	2,502
2.70	43	6.00	540	9.30	1,358	12.60	2,543
2.80	49	6.10	561	9.40	1,388	12.70	2,584
2.90	55	6.20	583	9.50	1,419	12.80	2,626
3.00	61	6.30	605	9.60	1,450	12.90	2,668
3.10	68	6.40	627	9.70	1,482	13.00	2,710
3.20	76	6.50	649	9.80	1,514	13.10	2,752
3.30	85	6.60	671	9.90	1,547	13.20	2,794
3.40	95	6.70	693	10.00	1,580	13.30	2,836
3.50	105	6.80	715	10.10	1,614	13.40	2,878
3.60	116	6.90	737	10.20	1,648	13.50	2,920
3.70	128	7.00	760	10.30	1,682	13.60	2,963
3.80	140	7.10	783	10.40	1,717	13.70	3,006
3.90	152	7.20	806	10.50	1,752	13.80	3,049
4.00	165	7.30	830	10.60	1,787	13.90	3,092
4.10	179	7.40	854	10.70	1,822	14.00	3,135
4.20	194	7.50	878	10.80	1,858	14.10	3,178
4.30	210	7.60	902	10.90	1,894	14.20	3,221
4.40	226	7.70	926	11.00	1,930	14.30	3,264
4.50	243	7.80	950	11.10	1,966	14.40	3,307
4.60	260	7.90	975	11.20	2,002	14.50	3,350
4.70	278	8.00	1,000	11.30	2,039	14.60	3,393
4.80	297	8.10	1,026	11.40	2,076	14.70	3,436
4.90	316	8.20	1,052	11.50	2,113	14.80	3,479
5.00	336	8.30	1,078	11.60	2,150	14.90	3,522
5.10	356	8.40	1,105	11.70	2,187	15.00	3,565
5.20	376	8.50	1,132	11.80	2,224		

NOTE—The above table is not applicable for ice or obstructed channel conditions. It is based on seven discharge measurements made during 1909 and 1910, and is well defined between gage heights 2.3 feet and 9.6 feet.

DAILY DISCHARGE, IN SECOND-FEET, OF EMBARRASS RIVER NEAR OAKLAND, ILLINOIS, FOR 1909-11

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27	158
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30	140
3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37	146
4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37	134
5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	34	128
6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	32	152
7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30	128
8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37	.....
9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40	.....
10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	34	.....
11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	32	.....
12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	32	.....
13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30	878
14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	32	1,190
15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	34	1,170
16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	49	975
17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	260	715
18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	336	583
19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	252	540
20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	179	488
21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	165	.....
22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	316	.....
23	.....	.....	.....	.....	.....	.....	.....	.....	.....	52	693	.....
24	.....	.....	.....	.....	.....	.....	.....	.....	.....	76	671	.....
25	.....	.....	.....	.....	.....	.....	.....	.....	.....	76	627	.....
26	.....	.....	.....	.....	.....	.....	.....	.....	.....	68	508	.....
27	.....	.....	.....	.....	.....	.....	.....	.....	.....	55	269	.....
28	.....	.....	.....	.....	.....	.....	.....	.....	.....	40	210	.....
29	.....	.....	.....	.....	.....	.....	.....	.....	.....	37	152	.....
30	.....	.....	.....	.....	.....	.....	.....	.....	.....	30	146	.....
31	.....	.....	.....	.....	.....	.....	.....	.....	.....	22	.....	.....
1910												
1	300	278	2,710	90	288	356	218	456	8	68	43	110
2	300	297	2,500	100	336	297	105	346	8	58	43	128
3	300	356	1,750	90	386	260	269	194	9	55	46	140
4	300	336	1,580	85	583	243	326	100	9	165	40	158
5	300	326	1,330	90	466	226	336	61	49	508	40	140
6	300	316	1,100	76	426	210	446	49	158	671	37	128
7	300	269	830	72	386	179	519	46	226	660	37	128
8	200	260	737	76	376	165	346	37	326	627	43	105
9	200	243	561	80	748	152	288	34	243	572	40	90
10	200	234	498	80	715	140	165	30	210	498	46	76
11	200	194	446	80	715	134	64	27	186	456	46	60
12	376	165	416	85	926	105	95	24	165	446	46	50
13	1,770	165	376	90	926	95	202	20	152	396	46	40
14	3,200	158	366	95	902	90	152	24	128	346	40	30
15	3,560	158	316	100	830	85	116	22	95	297	40	30
16	2,920	152	297	105	594	76	1,550	37	64	243	34	25
17	2,000	100	278	152	498	68	1,270	34	46	158	27	25
18	2,500	100	243	172	366	61	1,150	30	46	140	27	20
19	2,920	50	210	165	336	49	988	24	40	110	22	20
20	2,460	40	202	165	297	46	594	15	34	85	20	20
21	1,730	60	194	152	234	43	456	13	34	68	17	15
22	1,270	179	186	152	194	34	366	15	32	64	20	15
23	902	194	179	152	975	34	243	12	52	55	22	15
24	583	152	165	152	1,300	32	152	13	58	55	17	15
25	540	179	158	158	1,420	27	110	10	58	52	20	15
26	498	194	158	194	1,150	22	76	10	58	49	17	20
27	456	336	152	194	783	105	72	9	76	49	22	20
28	396	1,270	146	194	561	278	116	8	85	43	46	30
29	356	.....	128	226	498	336	498	8	76	43	49	40
30	346	.....	110	243	456	356	616	7	68	37	61	50
31	297	.....	95	.....	436	.....	540	6	.....	37	.....	100
1911												
1	55	1,930	356	336	416	46	55	5	5	3,460	649	498
2	76	1,890	297	316	406	43	17	5.5	5	3,090	436	477
3	65	1,750	243	436	396	43	17	6	5	2,540	356	416
4	60	1,720	210	336	336	226	17	7	7	2,090	316	376
5	60	1,480	179	760	297	682	13	7	7	1,790	243	336
6	52	1,390	179	1,210	226	605	13	6	9	1,500	260	316
7	49	1,270	226	1,720	165	519	13	6	27	1,860	336	316
8	49	1,160	297	1,510	165	243	13	5.5	49	1,910	396	477
9	46	1,000	297	1,050	165	260	13	5.5	43	1,510	436	498
10	46	854	316	783	152	152	13	5	49	1,390	436	498
11	43	561	356	760	116	116	10	5	55	1,240	540	519
12	55	356	376	760	95	68	10	4.5	76	1,050	760	519
13	95	436	376	1,480	76	58	10	4.5	128	878	1,080	498

DAILY DISCHARGE, IN SECOND-FEET, OF EMBARRASS RIVER NEAR OAKLAND, ILLINOIS, FOR 1909–11
—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1911												
14	152	519	356	2,920	68	58	8	4	179	760	1,270	456
15	165	561	316	2,880	61	55	8	4	316	583	1,080	416
16	243	605	297	2,710	55	49	8	4	436	396	1,000	396
17	278	715	278	2,460	55	43	8	4	498	436	950	416
18	456	854	260	2,220	49	37	8	4	627	456	1,000	456
19	498	950	243	1,330	55	37	8	3.5	583	693	1,100	456
20	508	902	226	1,100	55	32	6	3.5	540	1,080	950	540
21	498	854	210	1,000	76	32	6	3	519	1,480	902	627
22	477	783	194	783	105	37	6	4	498	1,580	1,080	671
23	519	627	186	760	95	37	6	4	477	1,820	1,270	649
24	737	561	179	715	95	40	6	5	326	2,000	1,080	627
25	1,210	519	165	693	85	46	5	5.5	416	1,680	830	627
26	1,270	498	210	605	68	46	5	6	1,160	1,390	540	583
27	1,420	436	260	540	61	55	5.5	6	1,890	1,000	477	627
28	1,750	396	297	519	61	68	5.5	7	2,960	830	519	540
29	1,970	.....	376	456	55	68	5	6	[1]3,300	760	519	498
30	2,000	.....	356	416	49	61	5	6	3,650	878	498	498
31	1,970	.....	356	.....	46	.....	5	5.5	.....	830	.....	519

[1] Discharge interpolated.

NOTE—Discharges are computed from a rating curve based on discharge measurements made during 1909-11, and well defined between 22 and 1,270 second-feet. Discharge estimated because of ice as equivalent to 117 second-feet per day December 8 to 12, 300 second-feet per day December 21 to 25, and 200 second-feet December 26 to 31, 1909. Discharges estimated because of ice January 1 to 11, February 17 to 21, and December 11 to 31, 1910, and January 3 to 7, 1911, from climatological records and runoff on adjacent drainage areas.

MONTHLY DISCHARGE OF EMBARRASS RIVER NEAR OAKLAND, ILLINOIS, FOR 1909–11

[Drainage area, 535 square miles]

Month	Discharge in second-feet				Runoff—depth in inches on drainage area	Accuracy
	Maximum	Minimum	Mean	Per square mile		
1909						
October (23–31)	76	22	50.7	0.095	0.03	A.
November	693	27	178	.333	.37	A.
December	1,190	.....	349	.652	.75	C.
1910						
January	3,560	200	1,030	1.93	2.22	C.
February	1,270	40	241	.450	.47	A.
March	2,710	95	594	1.11	1.28	B.
April	243	72	128	.239	.27	A.
May	1,420	194	616	1.15	1.33	A.
June	356	22	143	.267	.30	A.
July	1,500	64	401	.750	.86	A.
August	456	6	55.5	.104	.12	B.
September	326	8	93.3	.174	.19	A.
October	671	37	229	.428	.49	A.
November	61	17	35.1	.066	.07	B.
December	158	15	59.9	.112	.13	D.
The year	3,560	6	305	0.570	7.73	
1911						
January	2,000	43	544	1.02	1.18	A.
February	1,930	356	913	1.71	1.78	A.
March	376	165	273	.510	.59	A.
April	2,920	316	1,120	2.09	2.33	A.
May	416	46	136	.254	.29	A.
June	682	32	129	.241	.27	A.
July	55	5	10.6	.020	.02	C.
August	7	3	5.1	.0095	.01	C.
September	3,650	5	628	1.17	1.30	A.
October	3,460	396	1,390	2.60	3.00	A.
November	1,270	243	710	1.33	1.48	A.
December	671	316	495	.925	1.07	A.
The year	3,650	3	525	0.981	13.32	

EMBARRASS RIVER AT ST. MARIE, ILLINOIS

Location.—At highway bridge at the north end of Main Street, St. Marie, Ill., about 150 yards downstream from the Cincinnati, Hamilton and Dayton Railroad Bridge and 2½ miles upstream from the mouth of Hickory (or North Fork) Creek.

Records available.—October 20, 1909, to December 31, 1911.

Drainage area.—One thousand five hundred and forty square miles.

Gage.—Standard chain gage attached to bridge; datum unchanged since establishment.

Channel.—Shifting; section is at a pool and measurements to date indicate that the point of control has remained unchanged.

Discharge measurements.—Made from downstream side of highway bridge at ordinary stages, and also during high water from the downstream side of five wooden trestles on the C., H. and D. R. R., northwest of the bridge.

Floods.—The flood of the spring of 1908 reached a height of 22.5 feet by the present gage datum.

Winter flow.—Relation of gage height to discharge may be affected by ice during portions of December, January, and February.

DISCHARGE MEASUREMENTS OF EMBARRASS RIVER AT ST. MARIE, ILLINOIS, 1909–11

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1909		*Feet*	*Sq. ft.*	*Feet*	*Sec. ft.*
August 7	H. J. Jackson	97	634	3.48	*245
August 7	H. J. Jackson	111	432	3.44	236
October 20	H. J. Jackson	112	368	2.89	181
1910					
March 5	M. E. McChristie	174	2,160	16.01	4,600
April 8	H. J. Jackson	112	462	3.70	301
May 14	C. T. Bailey	122	1,040	8.67	1,780
May 15	C. T. Bailey	120	955	8.06	1,570
May 16	C. T. Bailey	118	839	7.18	1,210
May 17	C. T. Bailey	117	760	6.53	1,010
May 17	C. T. Bailey	117	753	6.43	1,000
May 18	C. T. Bailey	116	711	6.06	953
December 19	P. S. Monk	111	348	3.49	265
1911					
March 4	P. S. Monk	118	652	6.50	974
October 31	Monk and Brown	118	590	6.84	1,100

* Measurement not made at regular section.

DAILY GAGE HEIGHT, IN FEET, OF EMBARRASS RIVER AT ST. MARIE, ILLINOIS, FOR 1909–11

[T. L. Britton, observer]

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
1											2.2	4.0
2											2.2	3.9
3											2.3	3.7
4											2.2	3.5
5											2.2	3.5
6											2.1	3.5
7											2.15	3.7
8											2.15	3.7
9											2.15	3.5
10											2.2	4.

DAILY GAGE HEIGHT, IN FEET, OF EMBARRASS RIVER AT ST. MARIE, ILLINOIS—*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
11											2.2	4.0
12											2.2	4.6
13											2.2	12.0
14											2.2	16.1
15											2.3	15.9
16											2.3	14.0
17											2.7	11.1
18											4.4	8.8
19											3.5	7.5
20										2.9	3.0	6.5
21										2.85	3.7	5.4
22										2.45	3.5	5.4
23										2.25	5.8	5.4
24										3.1	10.0	.....
25										3.6	7.1	.....
26										2.9	6.2	.....
27										2.5	5.7	.....
28										2.4	5.1	.....
29										2.5	4.6	.....
30										2.4	4.4	4.5
31										2.3	.....	.....
1910												
1	.....	5.9	18.7	4.0	4.4	5.2	5.1	8.5	2.5	2.6	3.1	8.7
2	.....	5.5	18.3	4.1	4.3	5.6	4.5	8.0	2.4	2.4	3.1	6.8
3	.....	6.0	17.7	3.9	6.0	5.2	5.2	5.6	2.4	2.4	3.0	5.9
4	.....	6.8	17.2	3.9	13.2	.....	6.9	5.0	2.6	5.7	3.0	5.4
5	.....	6.1	15.9	3.9	10.0	.....	10.7	4.5	2.7	14.4	3.0	5.1
6	.....	5.7	14.2	3.9	7.1	.....	10.3	4.1	2.5	17.6	2.9	4.7
7	.....	5.4	12.4	3.8	6.1	.....	7.1	4.2	2.5	18.7	2.9	4.5
8	5.4	5.0	10.5	3.7	7.1	.....	6.1	3.7	4.2	18.5	2.9	4.2
9	.....	4.9	9.2	3.6	9.1	.....	6.2	3.6	6.1	16.5	2.9	4.1
10	.....	4.9	8.4	3.5	8.1	4.1	5.0	3.5	5.9	12.8	2.8	3.9
11	.....	4.7	7.6	3.4	7.5	4.0	4.5	3.4	5.0	8.8	2.8	3.8
12	.....	4.5	7.1	3.4	11.1	3.7	4.2	3.3	4.4	7.2	2.7	3.6
13	7.2	4.3	6.7	3.3	11.4	3.5	5.3	3.2	4.0	6.3	2.7	3.8
14	14.0	5.5	6.4	3.3	8.8	3.6	4.9	3.1	4.8	5.8	2.7	3.7
15	16.0	5.0	6.1	3.3	7.9	3.6	5.1	2.8	3.8	5.5	2.7	3.5
16	16.0	5.0	5.8	6.2	7.0	3.2	15.5	2.8	3.5	5.0	2.6	3.5
17	15.1	4.7	5.5	10.3	6.5	3.2	18.5	3.1	3.2	4.8	2.6	3.4
18	15.3	4.9	5.4	9.1	6.0	3.1	18.9	3.2	3.0	4.5	2.6	3.4
19	15.9	4.9	5.2	6.7	5.7	3.1	18.3	3.7	2.8	4.3	2.6	3.4
20	17.4	4.9	5.1	6.3	5.4	3.0	16.2	3.6	2.6	4.1	2.5	3.2
21	17.1	5.2	5.0	5.4	5.2	2.9	12.0	3.1	2.6	4.1	2.5	3.6
22	15.3	6.5	4.9	5.5	5.1	2.8	8.1	2.8	2.5	3.9	2.4	3.4
23	12.9	7.4	4.7	4.9	7.5	2.9	6.9	2.8	2.5	3.8	2.4	3.2
24	10.3	7.1	4.6	4.8	12.0	2.7	6.0	2.8	2.5	3.8	2.4	3.4
25	8.7	6.5	4.5	4.5	9.3	2.6	5.5	2.8	2.4	3.7	2.4	2.9
26	7.8	5.6	4.5	4.3	8.9	2.9	5.1	3.0	3.1	3.5	2.4	2.9
27	7.5	15.7	4.3	4.8	8.2	4.0	4.9	6.2	3.1	3.5	2.8	3.0
28	7.4	18.1	4.2	4.9	9.1	4.3	4.3	4.8	3.0	3.4	11.3	3.4
29	6.9	.....	4.2	4.5	7.3	7.0	8.2	3.2	2.8	3.3	15.6	5.9
30	6.4	.....	4.1	4.4	7.2	5.4	10.2	2.9	2.7	3.2	12.8	9.4
31	6.1	.....	4.0	.....	5.9	.....	11.2	2.7	.....	3.2	.....	8.5
1911												
1	9.7	14.0	7.7	5.3	11.1	3.2	2.75	1.9	.....	18.55	6.5	6.8
2	10.2	12.4	7.15	5.0	11.7	3.05	2.65	1.85	.....	19.5	6.1	6.6
3	14.7	10.6	6.8	4.9	11.0	3.0	2.55	1.85	.....	19.55	5.8	6.4
4	10.0	9.2	6.45	13.5	10.0	2.9	2.45	1.85	.....	19.2	5.5	6.2
5	8.7	8.4	6.4	16.0	8.7	2.85	2.4	1.9	.....	18.85	6.0	6.0
6	7.6	8.85	6.3	16.7	6.5	3.0	2.3	1.9	.....	18.45	6.5	5.7
7	7.6	11.3	10.3	16.0	6.1	4.65	2.15	2.65	1.85	17.3	7.1	5.5
8	7.7	9.9	16.0	14.0	5.9	5.0	2.15	2.25	1.85	15.95	7.1	5.4
9	7.8	9.0	17.0	11.7	5.6	4.3	2.15	1.95	2.55	13.4	6.5	5.7
10	7.2	7.95	15.5	10.0	5.5	3.95	2.2	1.9	2.3	11.05	6.1	8.5
11	6.4	7.2	13.1	8.7	5.3	3.9	2.1	1.9	2.65	9.95	5.8	11.0
12	6.2	6.75	9.7	7.9	5.1	3.55	2.05	1.75	3.25	8.95	8.0	10.0
13	6.3	6.6	9.2	12.4	5.0	3.4	2.05	1.75	4.25	8.25	14.1	9.8
14	10.5	6.5	8.2	16.4	4.8	3.2	2.05	1.75	10.55	7.55	10.0	6.5
15	15.3	7.95	7.5	17.6	4.5	2.95	2.1	1.75	10.6	7.25	9.2	6.8
16	14.1	7.8	7.2	18.2	4.4	2.9	2.1	1.8	14.25	6.75	9.2	6.9
17	11.3	12.2	6.6	17.5	4.4	2.75	2.05	1.75	16.75	6.15	9.4	10.5
18	9.8	14.2	6.5	16.4	4.3	3.3	2.05	1.75	14.95	7.85	15.7	9.0
19	8.7	14.0	6.8	15.6	4.2	3.0	2.05	.....	8.15	7.95	17.0	7.6
20	8.0	14.7	6.4	16.9	4.1	2.85	2.1	.....	6.7	7.55	15.5	7.4
21	6.8	13.7	5.9	15.9	4.5	2.8	2.1	.....	6.45	7.15	13.2	9.0
22	8.2	11.7	5.6	12.5	4.1	2.55	1.95	.....	6.15	7.85	11.3	11.8
23	7.7	9.7	5.4	11.2	3.95	2.5	1.95	.....	5.45	9.85	10.0	9.6

DAILY GAGE HEIGHT, IN FEET, OF EMBARRASS RIVER AT ST. MARIE, ILLINOIS—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1911												
24	7.2	9.15	5.2	9.1	3.9	2.5	1.95	.....	5.35	10.65	9.0	8.3
25	6.5	10.0	5.0	8.1	3.8	3.45	2.0	.....	5.95	10.45	8.2	7.7
26	6.4	11.7	5.0	7.5	3.65	3.0	1.9	.....	15.25	10.5	7.5	7.4
27	9.1	11.9	9.0	7.1	3.5	2.95	1.85	.....	14.95	9.45	7.2	8.1
28	15.3	8.9	8.8	7.1	3.35	2.8	1.85	.....	11.45	8.95	7.0	7.5
29	16.8	.....	6.6	7.6	3.4	3.0	1.95	.....	16.75	8.45	8.5	6.7
30	16.5	.....	6.1	10.0	3.3	2.85	1.9	.....	17.95	7.15	7.5	7.9
31	15.6	.....	5.5	.....	3.25	.....	.....	.....	.....	6.8	.....	6.5

NOTE—Ice conditions December 8–31, 1909. December 12–19, 1909, ice was floated out by a rise. December 20–31, 1909, river was frozen from bank to bank because of ice gorge below. River frozen January 1–12, 1910, and January 4–13, 1911. Gage read to top of ice December 10 and 11, 22–23, and 30, 1909; January 8, 13–16, and December 25 and 26, 1910; January 4–11, 1911.

July 15–September 6, 1911, observer reported a sand bar underneath gage. From July 15 to about August 19, 1911, the bar was probably covered by water and the discharge is fairly well represented by the gage heights. From about August 19–September 16, the observer reported "Sand bar reading beneath gage." During this period there was probably no water over the sand bar and the reported gage heights do not give the elevation of the water surface. Minimum stage was aproximately 1.55 feet.

RATING TABLE FOR EMBARRASS RIVER AT ST. MARIE, ILLINOIS, FROM OCTOBER 20, 1909–DECEMBER 31, 1911

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.60	85	4.90	532	8.20	1,604	11.50	2,905
1.70	91	5.00	555	8.30	1,641	11.60	2,946
1.80	97	5.10	579	8.40	1,678	11.70	2,987
1.90	103	5.20	604	8.50	1,715	11.80	3,028
2.00	109	5.30	630	8.60	1,753	11.90	3,069
2.10	115	5.40	656	8.70	1,791	12.00	3,110
2.20	122	5.50	683	8.80	1,829	12.10	3,151
2.30	129	5.60	711	8.90	1,867	12.20	3,192
2.40	136	5.70	740	9.00	1,905	12.30	3,233
2.50	144	5.80	769	9.10	1,944	12.40	3,274
2.60	152	5.90	799	9.20	1,983	12.50	3,315
2.70	160	6.00	830	9.30	2,022	12.60	3,356
2.80	169	6.10	861	9.40	2,061	12.70	3,397
2.90	179	6.20	893	9.50	2,100	12.80	3,438
3.00	190	6.30	926	9.60	2,140	12.90	3,479
3.10	202	6.40	959	9.70	2,180	13.00	3,520
3.20	215	6.50	992	9.80	2,220	13.10	3,561
3.30	229	6.60	1,026	9.90	2,260	13.20	3,602
3.40	244	6.70	1,060	10.00	2,300	13.30	3,642
3.50	259	6.80	1,095	10.10	2,340	13.40	3,684
3.60	275	6.90	1,130	10.20	2,380	13.50	3,725
3.70	291	7.00	1,165	10.30	2,420	13.60	3,766
3.80	308	7.10	1,201	10.40	2,460	13.70	3,807
3.90	326	7.20	1,237	10.50	2,500	13.80	3,848
4.00	345	7.30	1,273	10.60	2,540	13.90	3,889
4.10	364	7.40	1,309	10.70	2,580	14.00	3,930
4.20	383	7.50	1,345	10.80	2,620	15.00	4,340
4.30	403	7.60	1,382	10.90	2,660	16.00	4,750
4.40	423	7.70	1,419	11.00	2,700	17.00	5,160
4.50	444	7.80	1,456	11.10	2,741	18.00	5,570
4.60	465	7.90	1,493	11.20	2,782	19.00	5,980
4.70	487	8.00	1,530	11.30	2,823		
4.80	509	8.10	1,567	11.40	2,864		

NOTE—The above table is not applicable for ice or obstructed channel conditions. It is based on fourteen discharge measurements made during 1909–11, and is well defined between gage heights 2.8 and 8.9 feet, fairly well defined between gage heights 9.0 and 16.0 feet and is poorly defined below gage height 2.7 feet. Above gage height 16.0 feet the rating curve is a tangent, the difference being forty-one per tenth.

DAILY DISCHARGE IN SECOND-FEET OF EMBARRASS RIVER AT ST. MARIE, ILLINOIS, FOR 1909–11

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	122	345
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	122	326
3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	129	291
4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	122	259
5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	122	259
6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	115	259
7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	118	291
8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	118	250
9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	118	250
10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	122	250
11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	122	250
12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	122	465
13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	122	3,110
14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	122	4,790
15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	129	4,710
16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	129	3,930
17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	160	2,740
18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	423	1,830
19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	259	1,340
20	.....	.....	.....	.....	.....	.....	.....	.....	.....	179	190	800
21	.....	.....	.....	.....	.....	.....	.....	.....	.....	174	291	500
22	.....	.....	.....	.....	.....	.....	.....	.....	.....	140	259	400
23	.....	.....	.....	.....	.....	.....	.....	.....	.....	126	769	400
24	.....	.....	.....	.....	.....	.....	.....	.....	.....	202	2,300	400
25	.....	.....	.....	.....	.....	.....	.....	.....	.....	275	1,200	400
26	.....	.....	.....	.....	.....	.....	.....	.....	.....	179	893	350
27	.....	.....	.....	.....	.....	.....	.....	.....	.....	144	740	350
28	.....	.....	.....	.....	.....	.....	.....	.....	.....	136	579	350
29	.....	.....	.....	.....	.....	.....	.....	.....	.....	144	465	350
30	.....	.....	.....	.....	.....	.....	.....	.....	.....	136	423	350
31	.....	.....	.....	.....	.....	.....	.....	.....	.....	129	.....	350
1910												
1	400	799	5,860	345	423	604	579	1,720	144	152	202	1,790
2	400	683	5,690	364	403	711	444	1,530	136	136	202	1,100
3	400	830	5,450	326	830	604	604	711	136	136	190	799
4	500	1,100	5,240	326	3,600	570	1,130	555	152	740	190	656
5	500	861	4,710	326	2,300	535	2,580	444	160	4,090	190	579
6	500	740	4,010	326	1,200	501	2,420	364	144	5,410	179	487
7	500	656	3,270	308	861	467	1,200	383	144	5,860	179	444
8	500	555	2,500	291	1,200	433	861	291	383	5,780	179	383
9	400	532	1,980	275	1,940	398	893	275	861	4,960	179	364
10	400	532	1,680	259	1,570	364	555	259	799	3,440	169	326
11	400	487	1,380	244	1,340	345	444	244	555	1,830	169	308
12	800	444	1,200	244	2,740	291	383	229	423	1,240	160	275
13	1,000	403	1,060	229	2,860	259	630	215	345	926	160	308
14	3,500	683	959	229	1,830	275	532	202	509	769	160	291
15	4,500	555	861	229	1,490	275	579	169	308	683	160	259
16	4,500	555	769	893	1,160	215	4,540	169	259	555	152	259
17	4,380	487	683	2,420	992	215	5,780	202	215	509	152	244
18	4,460	532	656	1,940	830	202	5,940	215	190	444	152	244
19	4,710	532	604	1,060	740	202	5,690	291	169	403	152	244
20	5,320	532	579	926	656	190	4,830	275	152	364	144	215
21	5,200	604	555	656	604	179	3,110	202	152	364	144	275
22	4,460	992	532	683	579	169	1,570	169	144	326	136	244
23	3,480	1,310	487	532	1,340	179	1,130	169	144	308	136	215
24	2,240	1,200	465	509	3,110	160	830	169	144	308	136	244
25	1,790	992	444	444	2,020	152	683	169	136	291	136	179
26	1,460	711	444	403	1,870	179	579	190	202	259	136	179
27	1,340	4,630	403	509	1,600	345	532	893	202	259	169	190
28	1,310	5,610	383	532	1,940	403	403	509	190	244	2,820	244
29	1,130	.....	383	444	1,270	1,160	1,600	215	169	229	4,590	799
30	959	.....	364	423	1,240	656	2,380	179	160	215	3,440	2,060
31	861	.....	345	.....	799	.....	2,780	160	.....	215	.....	1,720
1911												
1	2,180	3,930	1,420	630	2,740	215	164	103	.....	5,800	992	1,100
2	2,380	3,270	1,220	555	2,990	196	156	100	.....	6,180	861	1,030
3	2,200	2,540	1,100	532	2,700	190	148	100	.....	6,210	769	959
4	2,000	1,980	976	3,720	2,300	179	140	100	.....	6,060	683	893
5	1,850	1,680	959	4,750	1,790	174	136	103	.....	5,920	830	830
6	1,650	1,850	926	5,040	992	190	129	103	.....	5,750	992	740
7	1,500	2,820	2,240	4,750	861	476	118	156	100	5,280	1,200	683
8	1,350	2,260	4,750	3,930	799	555	118	126	100	4,730	1,200	656
9	1,200	1,900	5,160	2,990	711	403	118	106	148	3,680	992	740
10	1,050	1,510	4,540	2,300	683	336	122	103	129	2,720	861	1,720
11	900	1,240	3,560	1,790	630	326	115	103	156	2,280	769	2,700
12	893	1,080	2,180	1,490	579	267	112	94	222	1,890	1,530	2,300
13	926	1,030	1,980	3,270	555	244	112	94	393	1,620	3,970	2,220

DAILY DISCHARGE, IN SECOND-FEET, OF EMBARRASS RIVER AT ST. MARIE, ILLINOIS, FOR 1909–11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1911												
14	2,500	992	1,600	4,910	509	215	112	94	2,520	1,360	2,300	992
15	4,460	1,510	1,340	5,410	444	184	115	94	2,540	1,260	1,980	1,100
16	3,970	1,460	1,240	5,650	423	179	115	97	4,030	1,080	1,980	1,130
17	2,820	3,190	1,030	5,360	423	164	112	94	5,060	877	2,060	2,500
18	2,220	4,010	992	4,910	403	229	112	94	4,320	1,470	4,630	1,900
19	1,790	3,930	1,100	4,590	383	190	112	.....	1,590	1,510	5,160	1,380
20	1,530	4,220	959	5,120	364	174	115	.....	1,060	1,360	4,540	1,310
21	1,100	3,810	799	4,710	444	169	115	.....	976	1,220	3,600	1,900
22	1,600	2,990	711	3,320	364	148	106	.....	877	1,470	2,820	3,030
23	1,420	2,180	656	2,780	336	144	106	.....	670	2,240	2,300	2,140
24	1,240	1,960	604	1,940	326	144	106	.....	643	2,560	1,900	1,640
25	992	2,300	555	1,570	308	252	109	.....	814	2,480	1,600	1,420
26	959	2,990	555	1,340	283	190	103	.....	4,440	2,500	1,340	1,310
27	1,940	3,070	1,900	1,200	259	184	100	.....	4,320	2,080	1,240	1,570
28	4,460	1,870	1,830	1,200	236	169	100	.....	2,880	1,890	1,160	1,340
29	5,080	.....	1,030	1,380	244	190	106	.....	5,060	1,700	1,720	1,060
30	4,960	.....	861	2,300	229	174	103	.....	5,550	1,220	1,340	1,490
31	4,590	.....	683	.....	222	.....	103	.....	.....	1,100	.....	992

NOTE—Daily discharge January 1–16, 1910, and January 3–11, 1911, estimated, because of ice, from climatological records and runoff in adjacent drainage areas.

Daily discharge August 19–September 6, 1911, estimated, because of sand bar, from comparison with runoff in adjacent drainage areas. Mean discharge August, 19–31, 1911, estimated 85 second-feet. Mean discharge September 1–6, 1911, estimated as 80 second-feet.

MONTHLY DISCHARGE OF EMBARRASS RIVER AT ST. MARIE, ILLINOIS, FOR 1909–11

[Drainage area, 1,540 square miles]

Month	Discharge in second-feet				Runoff—depth in inches on drainage area	Accuracy
	Maximum	Minimum	Mean	Per square mile		
1909						
October (20-31)	275	126	164	0.106	0.05	.....
November	2,300	115	364	.236	.26	.....
December	4,790	250	998	.648	.75	.....
1910						
January	5,320	400	2,020	1.31	1.51	.....
February	5,610	403	1,020	.662	.69	.....
March	5,860	345	1,740	1.13	1.30	.....
April	2,420	229	556	.361	.40	.....
May	3,600	403	1,460	.948	1.09	.....
June	1,160	152	375	.244	.27	.....
July	5,940	383	1,810	1.18	1.36	.....
August	1,720	160	380	.247	.28	.....
September	861	136	261	.169	.19	.....
October	5,860	136	1,340	.870	1.00	.....
November	4,590	136	509	.431	.37	.....
December	2,060	179	514	.334	.39	.....
The year	5,940	136	1,000	.649	8.85	
1911						
January	5,080	893	2,180	1.42	1.64	B.
February	4,220	992	2,410	1.56	1.62	A.
March	5,160	555	1,600	1.04	1.04	A.
April	5,650	532	3,110	2.02	2.25	A.
May	2,990	222	791	.514	.59	B.
June	555	144	228	.148	.17	B.
July	164	100	117	.076	.09	C.
August	156	.....	95.8	.062	.07	D.
September	5,550	.....	1,640	1.06	1.18	A.
October	6,210	877	2,820	1.83	2.11	A.
November	5,160	683	1,910	1.24	1.38	A.
December	3,030	656	1,440	935	1.08	A.
The year	6,210	.....	1,520	.987	13.38	

LITTLE WABASH RIVER DRAINAGE BASIN

DESCRIPTION

The drainage basin of Little Wabash River lies in the southeastern part of the State of Illinois.

The river rises in the southwestern corner of Coles County, flows slightly southeastward, and discharges into Wabash River about 15 miles above its mouth, at the boundary line between White and Gallatin counties. Skillet Fork, its only important tributary, joins it not far above its mouth. The Little Wabash is about 150 miles long and its drainage area comprises 3,200 square miles. The elevation of the sources of the river is about 720 feet; at its mouth it is about 340 feet above sea level.

The basin is shaped somewhat like a parallelogram with the long sides north and south. The country is level or undulating. The soil, a rich black loam in the northern part, gradually changes into a yellow clay or "mulatto soil" in the southern part. There are no forested areas in this basin.

The annual rainfall is about 42 inches. The winters are mild; ice does not form very thick, and snowfall is light and does not last long.

No water-power sites exist anywhere in this basin.

The question of storage has not been investigated, though it is recognized as important in connection with the growing demand for water supplies and the general subjects of drainage and flood control. The United States Department of Agriculture is making a study of surface conditions with a view to formulating a plan for reclaiming and protecting areas that are overflowed during floods. Portions of the river have already been mapped for use in this study.

LITTLE WABASH RIVER NEAR CLAY CITY, ILLINOIS

Location.—At the Baltimore & Ohio Southwestern Railroad bridge about 2 miles east of Clay City, Ill., and about 5 miles above the mouth of Big Muddy Creek.

Records available.—October 3, 1908, to December 31, 1911.

Drainage area.—Eight hundred and eight square miles.

Gage.—Standard chain gage attached to bridge; datum unchanged.

Channel.—Probably permanent. Location of point of control not known.

Discharge measurements.—Made from downstream side of bridge.

Floods.—The flood of February 8, 1909, reached a height of 23.7 feet on the gage.

Winter flow.—Ice may affect the relation between gage height and discharge during portions of December, January, and February.

Remarks.—The station is at the toe of a horseshoe bend in the river and the ground inside the bend along the railroad is very low. During high water the Little Wabash overflows into Little Muddy Creek and in extreme high water into Big Muddy Creek, forming at such times a sheet of water 4 miles wide along the railroad; the high water discharge at this station cannot, therefore, be determined. Eight measurements of discharge were made at this station during 1909-1911, but estimates are withheld because of impossibility of determining the high water discharge.

DISCHARGE MEASUREMENTS OF LITTLE WABASH RIVER NEAR CLAY CITY, ILLINOIS, IN 1909–11

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1909		*Feet*	*Sq.-ft.*	*Feet*	*Sec.-ft.*
May 7	H. J. Jackson	59	266	7.62	157
November 6	H. J. Jackson	50	182	6.10	18
1910					
March 4	Jackson and McChristie	1,703	6,970	18.73	*9,760
March 11	H. J. Jackson	64	342	8.92	317
March 11	H. J. Jackson	64	341	8.89	302
December 18	Bailey and Monk	51	193	6.50	49
1911					
March 2	P. S. Monk	67	462	10.84	620
November 1	Monk and Brown	60	259	7.53	145

* Includes some of Little Muddy and Big Muddy Creeks.

DAILY GAGE HEIGHT, IN FEET, OF LITTLE WABASH RIVER NEAR CLAY CITY, ILLINOIS, FOR 1908–11

[Observer, William F. Davis]

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1											5.8	6.3
2											5.8	6.3
3											5.8	7.8
4											5.8	7.3
5											5.8	7.3
6											5.8	.....
7											5.8	6.3
8											5.8	6.3
9											5.8	6.1
10											5.8	6.1
11											5.9	6.1
12										5.9	5.8	6.1
13										5.9	5.8	.....
14										5.9	5.8	6.0
15										5.9	5.8	6.0
16										5.9	5.8	6.0
17										5.9	5.8	6.0
18										5.9	5.9	6.0
19										5.9	5.8	6.0
20										5.9	5.8	6.0
21										5.9	5.8	6.0
22										5.9	5.8	5.9
23										5.9	5.8	5.9
24										5.9	5.8	5.9
25										5.9	6.0	5.9
26										5.9	6.0	5.9
27										5.9	6.0	5.9
28										5.9	6.0	5.9
29										5.9	.....	5.9
30										5.8	6.3	5.9
31										5.9	.....	5.9
1909												
1	5.9	11.9	11.2	7.7	9.5	8.6	8.7	.....	6.0	6.0	6.2	7.1
2	5.9	9.5	10.9	7.7	.....	10.2	7.9	.....	6.0	6.0	6.2	7.0
3	.....	8.0	8.8	7.6	8.3	9.2	7.3	8.4	6.0	.....	6.1	6.9
4	5.9	7.0	8.2	.....	8.1	9.2	.....	7.3	6.0	6.0	6.1	6.8
5	5.9	7.0	8.2	7.5	7.8	12.5	.....	7.0	.....	6.0	6.1	6.7
6	5.9	6.9	7.9	7.2	7.7	.....	6.6	6.8	6.0	6.0	6.0	6.65
7	5.9	11.3	.....	8.3	7.6	10.6	10.2	6.6	6.0	5.9	6.25	6.95
8	5.9	13.7	7.9	12.7	7.4	9.4	14.7	.....	6.0	5.9	6.7	7.1
9	5.9	12.9	18.3	17.4	.....	8.6	16.8	6.3	6.0	5.9	6.6	7.1
10	.....	9.2	18.7	18.0	9.1	8.5	17.2	6.3	.....	.....	6.3	7.1
11	5.9	9.2	18.8	.....	15.4	8.3	.....	6.3	.....	5.8	6.2	7.4
12	6.0	11.3	18.8	17.9	15.1	10.9	18.0	6.3	.....	5.8	6.8	12.4
13	6.0	8.6	18.6	12.5	11.9	.....	17.8	6.3	.....	5.8	7.5	17.05
14	6.	.....	.....	18.1	10.0	10.6	17.6	6.3	6.4	5.8	7.4	18.1
15	6.0	13.0	15.9	18.6	12.6	12.6	17.8	.....	6.2	5.8	7.3	18.15
16	6.0	16.7	11.5	18.9	.....	10.8	18.1	6.2	6.0	5.8	7.4	18.4
17	.....	17.0	9.1	18.6	10.0	8.4	18.1	6.2	6.0	.....	9.4	17.8
18	6.0	17.0	8.9	.....	8.9	8.5	.....	6.2	6.0	6.4	10.7	13.4
19	6.0	13.7	8.1	13.6	8.3	9.5	18.0	6.2	.....	6.6	10.5	11.0
20	6.0	16.4	8.1	13.8	8.0	.....	17.8	6.2	6.0	.....	9.05	9.8

DAILY GAGE HEIGHT, IN FEET, OF LITTLE WABASH RIVER NEAR CLAY CITY, ILLINOIS, FOR 1908–11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
21	6.0	.....	.....	14.5	7.6	7.4	15.0	6.2	6.0	9.3	9.0	8.4
22	6.0	18.0	7.9	16.3	7.3	7.4	10.3	.....	6.2	8.6	7.7	8.4
23	6.0	18.5	7.6	17.3	.....	7.5	8.3	6.2	7.6	7.6	10.7	7.9
24	.....	18.5	7.6	17.4	7.1	7.5	7.8	6.2	9.1	.....	14.0	7.4
25	7.4	18.4	7.6	.....	7.0	7.8	.....	6.0	8.2	7.7	15.0	7.4
26	7.4	18.2	8.9	13.3	7.0	9.5	7.4	6.0	.....	7.8	11.9	7.25
27	7.4	18.2	9.2	9.9	7.6	.....	7.2	6.0	7.0	7.7	9.6	7.1
28	7.0	.....	.....	8.9	12.3	10.1	7.1	6.0	6.8	7.0	8.1	7.1
29	6.9	.....	8.3	10.1	10.8	9.3	7.1	.....	6.2	6.8	7.6	7.0
30	6.9	.....	7.9	12.0	.....	8.3	7.1	6.0	6.1	6 4	7.25	6.9
31	.....	.....	7.8	.....	.....	.....	.....	6.0	.....	.....	.....	6.9
1910												
1	6.9	8.4	18.75	6.7	7.9	10.4	7.8	6.85	6.8	7.05	6.15	12.35
2	7.0	8.9	19.5	6.7	7.4	8.7	7.2	6.8	6.6	7.0	6.2	9.4
3	7.1	8.9	19.0	6.7	7.1	8.0	7.0	6.7	6.9	6.4	6.2	8.3
4	7.1	9.45	18.7	6.7	7.1	7.7	7.0	6.7	7.0	10.55	6.15	7.85
5	8.4	11.2	18.5	6.9	10.55	7.8	11.7	6.5	8.0	18.1	6.1	7.4
6	8.9	10.2	18.3	7.0	10.8	10.2	13.7	6.5	8.3	18.7	6.1	7.15
7	9.3	9.0	17.0	7.0	9.0	10.1	14.2	6.4	7.9	19.0	6.05	7.2
8	9.3	8.4	13.35	7.0	9.4	8.4	12.0	6.4	9.8	18.8	6.1	7.1
9	9.3	7.85	11.3	7.0	11.6	7.9	9.5	6.4	12.3	19.1	6.05	6.85
10	7.9	7.4	9.3	7.0	12.5	7.4	9.0	6.4	14.0	19.0	6.1	6.9
11	7.3	7.55	8.95	6.8	11.5	7.3	8.8	6.4	11.0	18.7	6.1	6.85
12	7.3	7.45	8.5	6.6	9.7	7.3	8.4	6.3	10.4	16.8	6.05	6.9
13	10.05	7.3	8.3	6.55	13.5	7.2	7.7	6.3	7.1	12.8	6.1	6.8
14	15.9	7.3	8.0	6.55	15.4	7.0	7.7	6.3	6.85	10.6	6.05	6.65
15	18.0	7.9	7.9	6.55	.....	6.8	7.7	6.25	6.7	7.95	6.1	6.6
16	18.2	9.4	7.7	7.0	9.7	6.7	9.0	6.25	6.65	7.8	6.05	6.55
17	18.2	9.4	7.5	8.6	8.6	6.6	16.9	6.25	6.7	7.45	6.1	6.6
18	17.9	9.4	7.4	9.6	8.15	6.5	18.0	6.25	6.45	7.4	6.1	6.55
19	17.55	9.2	7.3	9.9	7.9	6.5	18.1	6.2	6.5	7.4	6.05	6.6
20	17.8	9.2	7.2	9.3	7.8	7.4	18.15	6.2	6.4	7.25	6.1	6.6
21	18.0	9.2	7.1	8.4	7.6	6.6	18.1	6.3	6.35	7.2	6.15	6.6
22	17.45	10.2	7.1	8.0	7.6	6.4	16.1	6.7	6.4	6.75	6.2	6.5
23	14.0	12.7	7.1	7.7	7.5	6.4	9.6	6.8	6.25	6.8	6.2	6.5
24	10.4	13.3	7.3	7.4	12.3	6.4	8.5	6.8	6.3	6.8	6.15	6.5
25	9.5	12.5	7.3	7.3	16.1	.....	8.0	6.8	6.2	6.75	6.2	6.5
26	9.0	10.2	7.3	7.4	17.1	6.3	7.5	6.8	6.15	6.8	6.15	6.5
27	8.9	14.45	7.0	7.7	17.3	6.6	7.4	12.3	6.2	6.75	6.2	6.5
28	9.5	18.8	6.8	8.6	14.1	6.6	7.3	12.9	7.15	6.7	6.3	6.5
29	9.95	.....	6.8	9.0	13.4	12.0	7.1	10.1	7.2	6.6	6.35	6.5
30	9.0	.....	6.7	8.2	8.9	9.0	7.0	7.7	7.1	6.35	12.9	6.9
31	8.9	.....	6.7	.....	9.5	.....	7.0	7.1	.....	6.3	.....	10.2
1911												
1	11.1	13.9	13.9	8.4	18.4	6.6	7.7	6.0	6.0	18.7	7.7	9.3
2	10.1	10.7	10.9	8.0	18.6	6.6	7.0	6.0	6.0	19.95	7.5	8.55
3	12.0	10.0	9.6	7.9	18.5	6.3	6.3	6.1	5.95	19.55	7.3	8.3
4	15.2	8.9	9.25	8.5	18.3	6.2	6.3	6.05	6.2	19.35	7.2	8.0
5	14.6	8.6	9.3	13.1	14.9	6.1	6.3	5.95	6.4	19.35	10.3	7.9
6	11.6	8.4	9.4	15.4	10.9	6.1	6.3	6.0	6.35	19.2	12.6	7.6
7	10.0	10.3	9.7	15.5	10.7	6.5	6.2	6.05	6.4	19.0	12.3	7.5
8	8.6	12.3	15.9	10.5	8.4	7.7	6.1	6.1	6.45	18.8	11.2	7.5
9	8.4	11.8	18.0	10.0	8.2	7.3	6.1	6.1	6.9	18.2	10.4	7.65
10	8.3	11.0	18.4	8.9	8.1	7.1	6.1	7.75	8.8	16.2	9.2	7.9
11	7.9	9.4	18.4	8.6	8.0	6.9	6.1	6.8	8.85	10.5	8.5	11.4
12	7.7	9.0	14.7	8.3	8.0	6.5	6.0	6.75	9.3	9.35	.....	15.4
13	7.7	8.8	13.3	9.6	7.7	6.4	6.0	6.55	9.5	9.1	13.2	15.3
14	7.6	8.7	12.4	17.0	7.6	6.3	6.0	6.5	9.75	8.6	16.9	11.1
15	9.6	8.4	10.2	18.3	7.3	6.3	6.0	6.35	11.0	8.15	14.0	9.5
16	14.2	8.9	8.8	18.4	7.2	6.3	6.1	6.2	15.0	8.2	10.9	9.5
17	13.7	10.4	8.4	18.4	7.1	6.4	6.0	6.1	17.2	7.8	10.2	11.1
18	9.7	12.7	8.1	18.4	7.0	6.4	6.1	6.0	18.1	7.75	11.0	14.5
19	8.9	15.2	7.9	17.3	7.0	6.7	6.1	6.0	18.2	7.7	17.0	13.2
20	8.3	17.4	9.5	17.6	7.0	6.6	6.1	6.0	18.3	7.6	18.0	11.0
21	8.1	17.6	9.0	18.2	6.9	6.5	6.1	6.15	18.55	7.6	17.5	10.0
22	.....	17.1	8.3	18.3	6.8	6.4	6.1	6.6	18.4	12.4	16.4	15.15
23	8.0	14.4	8.0	17.3	6.7	6.3	6.1	6.5	14.05	13.5	15.1	16.2
24	8.0	13.1	7.8	13.8	9.0	6.3	6.1	6.5	9.8	12.2	10.4	11.4
25	8.0	12.2	7.4	9.7	8.1	6.3	6.05	6.4	9.75	11.6	9.6	10.9
26	7.9	14.0	7.5	8.7	7.5	6.5	6.0	5.95	9.8	11.0	9.2	9.5
27	8.4	14.0	9.3	8.4	7.3	9.9	6.0	6.0	15.0	9.3	8.6	9.2
28	10.6	14.0	14.3	8.4	7.0	8.3	6.0	6.0	17.2	8.35	8.6	11.0
29	14.0	.....	12.8	8.7	6.8	8.2	6.0	5.95	18.3	8.2	8.6	9.2
30	17.4	.....	11.2	15.7	6.7	8.1	6.0	6.0	18.6	7.45	9.3	10.1
31	17.0	.....	9.0	.....	6.6	.....	6.0	5.95	.....	7.5	.....	10.5

NOTE—Ice conditions January 12 and December 8–31, 1909. Gage read to top of ice December 22–31, 1910. Relation between gage height and discharge probably not affected by ice during 1911.

LITTLE WABASH RIVER NEAR GOLDEN GATE, ILLINOIS

Location.—At Southern Railroad Bridge about 1 mile west of Golden Gate, Ill., and 1 mile below the mouth of Elm Creek.

Records available.—August 17, 1908, to December 31, 1911.

Drainage area.—One thousand seven hundred and eighty square miles.

Gage.—Standard chain gage attached to bridge; datum unchanged.

Channel.—Probably permanent. Location of control not known.

Discharge measurements.—Made from downstream side of the bridge and in high water also from downstream side of three wooden trestles east of the gaging station.

Floods.—The flood of May, 1908, reached a height of about 29.2 feet on the present gage datum.

Winter flow.—Ice may affect the relation between gage height and discharge during portions of December, January, and February.

Accuracy.—Backwater affects the relation of gage height to discharge at this station and no reliable estimates can be made.

DISCHARGE MEASUREMENTS OF LITTLE WABASH RIVER NEAR GOLDEN GATE, ILLINOIS, 1908–11

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1908		*Feet*	*Sq. ft.*	*Feet*	*Sec.-ft.*
May 9	Hidinger and Baxter*	1,438	17,200	28.50	35,900
July 17	R. J. Taylor	75	301	2.60	19
1909					
March 10	W. M. O'Neill	1,220	9,750	23.50	9,650
May 4	H. J. Jackson	88	578	6.00	351
May 5	H. J. Jackson	85	550	5.60	306
November 11	H. J. Jackson	75	311	2.80	60
1910					
March 2	Jackson and McChristie	1,228	9,420	23.59	9,115
March 7	H. J. Jackson	1,252	13,100	25.42	9,520
March 9	H. J. Jackson	1,239	11,900	24.56	8,400
March 12	H. J. Jackson	1,215	7,650	22.23	4,240
March 14	H. J. Jackson	207	2,360	18.65	2,080
March 15	H. J. Jackson	155	1,760	15.50	1,170
March 16	H. J. Jackson	124	1,070	10.25	747
March 17	H. J. Jackson	93	630	6.48	410
December 15	Bailey and Monk	76	328	3.05	†76.3
December 16	Bailey and Monk	76	323	2.90	†59.7
1911					
March 7	P. S. Monk	96	632	6.50	756
March 8	P. S. Monk	132	982	9.81	1,490
October 30	Monk and Brown	85	461	4.71	294

* Engineers from the United States Department of Agriculture. This measurement gives the true flow. It was taken after the heavy rain of May 3–8 and there were no backwater conditions.

† Ice conditions. Measurement made with a slightly damaged meter.

DAILY GAGE HEIGHT, IN FEET, OF LITTLE WABASH RIVER NEAR GOLDEN GATE, ILLINOIS, FOR 1908–11

[Observer, Henry Chalcraft]

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1									2.0	2.0	1.9	2.6
2									2.0	2.0	1.8	2.6
3									1.9	1.9	1.9	2.6
4									1.9	1.9	1.9	2.5
5									1.8	1.9	1.9	3.5
6									1.9	2.0	1.9	3.5

DAILY GAGE HEIGHT, IN FEET, OF LITTLE WABASH RIVER NEAR GOLDEN GATE, ILLINOIS, FOR 1908–11 —*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
7	.....	.....	.....	.....	.....	.....	.....	.....	1.9	2.0	2.0	3.4
8	.....	.....	.....	.....	.....	.....	.....	.....	1.9	2.0	2.0	3.1
9	.....	.....	.....	.....	.....	.....	.....	.....	1.8	2.0	2.0	2.7
10	.....	.....	.....	.....	.....	.....	.....	.....	1.8	2.0	2.1	2.5
11	.....	.....	.....	.....	.....	.....	.....	.....	1.8	2.5	2.1	2.5
12	.....	.....	.....	.....	.....	.....	.....	.....	1.8	2.1	2.1	2.4
13	.....	.....	.....	.....	.....	.....	.....	.....	1.8	2.1	2.1	2.3
14	.....	.....	.....	.....	.....	.....	.....	.....	1.8	2.1	2.0	2.2
15	.....	.....	.....	.....	.....	.....	.....	.....	1.8	2.0	2.0	2.2
16	.....	.....	.....	.....	.....	.....	.....	.....	1.8	2.1	2.0	2.1
17	.....	.....	.....	.....	.....	.....	.....	1.9	1.7	2.0	2.0	2.1
18	.....	.....	.....	.....	.....	.....	.....	2.0	1.8	2.0	2.1	2.1
19	.....	.....	.....	.....	.....	.....	.....	2.0	1.8	2.0	2.1	2.1
20	.....	.....	.....	.....	.....	.....	.....	2.1	1.7	2.2	2.1	2.0
21	.....	.....	.....	.....	.....	.....	.....	2.2	1.7	2.1	2.1	2.0
22	.....	.....	.....	.....	.....	.....	.....	2.2	1.7	2.0	2.3	1.9
23	.....	.....	.....	.....	.....	.....	.....	2.0	1.7	1.9	2.2	1.9
24	.....	.....	.....	.....	.....	.....	.....	2.1	1.7	1.9	2.2	1.9
25	.....	.....	.....	.....	.....	.....	.....	2.1	1.7	1.9	2.2	1.7
26	.....	.....	.....	.....	.....	.....	.....	2.0	1.8	1.8	2.5	1.7
27	.....	.....	.....	.....	.....	.....	.....	2.0	1.8	1.8	2.6	1.6
28	.....	.....	.....	.....	.....	.....	.....	2.2	2.0	1.8	2.7	1.7
29	.....	.....	.....	.....	.....	.....	.....	2.0	2.0	1.8	2.7	1.7
30	.....	.....	.....	.....	.....	.....	.....	2.0	1.9	1.9	2.7	1.8
31	.....	.....	.....	.....	.....	.....	.....	2.0	.....	1.9	.....	1.8
1909												
1	1.9	2.8	22.8	4.8	11.0	7.7	7.7	4.1	2.5	2.6	3.3	4.7
2	1.8	2.7	22.4	4.5	9.1	5.3	7.7	4.0	2.6	2.4	3.0	4.3
3	1.9	3.3	21.8	3.8	8.0	5.1	6.9	4.9	2.4	2.3	2.6	4.0
4	1.8	4.4	21.0	4.3	7.5	6.9	5.5	5.8	2.3	2.1	2.5	3.8
5	1.7	4.8	19.2	4.1	6.1	10.9	4.5	4.9	2.3	2.3	2.4	4.0
6	1.7	4.0	16.1	4.1	5.7	14.4	4.0	4.7	2.3	2.2	2.7	4.1
7	1.7	3.9	16.1	5.8	5.2	14.9	3.5	3.8	2.2	2.2	2.4	4.2
8	1.6	4.1	17.7	4.2	5.1	15.5	.....	3.4	2.2	2.2	2.3	3.7
9	1.6	5.9	22.8	5.8	5.7	14.5	7.3	3.2	2.3	2.1	2.4	4.0
10	1.6	8.9	22.6	11.1	5.8	11.5	9.9	3.7	3.5	2.2	2.4	4.2
11	1.6	7.5	24.8	12.1	5.2	9.7	12.7	2.9	4.3	2.2	2.7	4.3
12	1.6	7.6	25.8	13.8	8.0	6.6	13.8	2.8	6.2	2.1	3.4	5.4
13	1.6	7.7	25.2	15.4	8.7	7.8	14.2	3.0	5.9	2.1	3.7	13.6
14	1.6	10.6	25.1	16.6	8.9	11.0	15.3	3.3	4.9	2.0	3.8	16.3
15	1.6	15.5	24.8	17.6	9.0	9.9	15.5	3.0	4.6	2.1	6.1	17.3
16	1.6	16.0	24.5	18.1	8.4	9.1	17.4	2.9	3.6	1.9	6.1	18.4
17	1.6	17.0	24.0	18.1	9.0	9.0	18.2	3.0	3.0	2.2	7.7	19.1
18	1.6	16.1	23.5	17.8	7.2	8.0	18.3	2.9	2.7	2.5	9.0	19.1
19	1.6	16.1	22.8	18.2	7.3	6.4	18.3	2.7	2.6	2.7	10.0	19.0
20	1.7	18.0	21.6	20.6	7.2	5.9	18.2	2.6	2.5	2.9	9.8	19.0
21	1.7	18.7	19.5	22.1	7.1	5.8	17.6	2.5	2.4	3.6	7.5	18.8
22	1.9	18.8	17.3	22.4	6.9	6.1	17.1	2.4	2.6	3.7	6.7	17.9
23	2.1	19.1	13.3	22.2	4.9	5.1	16.9	2.5	3.1	5.6	6.0	14.3
24	2.0	20.9	9.5	21.8	4.1	6.9	16.7	2.4	3.1	5.7	8.2	8.5
25	2.3	22.0	5.8	21.8	4.0	9.1	15.7	2.3	3.0	6.1	12.0	7.5
26	2.8	22.5	5.3	21.8	4.2	10.1	10.5	2.3	4.9	5.3	13.2	5.4
27	2.7	23.5	5.2	19.0	4.9	9.1	10.4	2.4	4.6	4.7	2.8	5.4
28	3.2	22.8	6.6	18.0	6.7	8.8	10.6	2.3	3.6	4.6	11.1	4.6
29	3.9	.....	7.0	17.3	8.3	8.2	4.7	3.3	3.5	4.5	8.0	4.1
30	3.6	.....	6.6	9.3	9.9	8.5	4.7	2.4	3.1	4.0	6.7	4.0
31	3.0	.....	5.5	.....	7.7	.....	4.4	2.5	.....	3.6	.....	3.9
1910												
1	3.7	7.7	22.2	3.3	6.5	7.0	6.8	4.3	3.95	3.45	3.1	8.45
2	4.7	6.9	23.3	3.0	6.0	6.1	6.1	3.75	3.6	3.4	2.95	8.55
3	5.1	6.2	24.3	3.3	6.5	6.2	5.4	3.3	3.25	3.05	2.75	7.95
4	5.2	5.9	25.4	3.2	5.3	5.1	4.3	3.15	3.1	7.5	2.65	6.55
5	5.3	7.2	25.8	3.1	4.7	4.4	6.8	3.1	6.95	14.45	2.65	5.2
6	6.2	9.5	25.8	3.0	4.3	4.2	9.15	3.0	12.5	20.4	2.9	4.25
7	8.0	9.0	25.5	3.4	7.3	4.3	11.4	2.85	14.1	22.5	2.95	3.95
8	7.7	7.4	25.1	3.5	8.1	6.5	12.35	2.8	15.2	24.2	2.85	3.75
9	7.3	6.9	24.7	3.8	6.7	6.6	12.6	2.65	15.7	24.9	2.75	3.55
10	7.0	6.0	24.3	3.8	5.6	5.5	11.3	2.7	15.1	25.7	2.65	3.5
11	6.6	5.4	23.6	3.4	7.5	4.6	8.45	2.7	14.8	25.7	2.7	3.35
12	5.0	5.2	22.7	3.8	8.9	4.1	7.3	2.55	14.5	25.6	2.65	3.35
13	8.0	4.3	21.3	5.7	7.5	4.1	6.95	2.6	12.5	25.4	2.55	2.75
14	14.8	4.5	19.7	5.0	7.0	4.7	6.2	2.55	8.4	25.2	2.55	2.95
15	16.5	4.5	16.7	4.6	11.2	4.3	5.3	2.6	5.75	24.8	2.55	3.1
16	17.2	4.5	12.4	5.4	11.5	3.9	4.65	2.5	4.65	24.4	2.5	2.85
17	17.6	4.4	7.6	7.4	9.9	3.5	8.4	2.45	3.7	23.9	2.65	2.9
18	18.0	5.5	4.9	9.7	7.5	3.3	12.75	2.5	3.45	23.8	2.55	2.9
19	18.5	5.9	4.6	12.0	7.4	3.1	14.4	2.35	3.3	22.1	2.55	2.8

DAILY GAGE HEIGHT, IN FEET, OF LITTLE WABASH RIVER NEAR GOLDEN GATE, ILLINOIS, FOR 1908–11
—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1910												
20	19.6	7.1	4.4	11.5	6.5	3.0	15.0	2.4	3.05	20.1	2.55	2.8
21	20.3	7.5	4.1	9.9	5.1	3.0	15.45	2.5	2.85	17.35	2.5	2.7
22	20.3	9.4	4.1	8.1	4.5	5.9	15.1	2.35	2.8	13.4	2.45	2.6
23	20.5	12.9	4.1	6.5	4.6	5.4	14.95	3.9	2.35	7.75	2.45	2.6
24	20.3	14.6	4.0	6.0	7.9	4.9	15.0	3.55	2.6	4.35	2.45	2.6
25	19.7	15.4	3.9	5.5	9.9	4.2	14.9	3.5	2.45	3.95	2.45	2.5
26	18.8	15.8	3.8	5.6	12.1	3.5	13.15	4.1	2.45	3.65	2.4	2.6
27	16.5	17.9	3.9	6.0	12.6	3.0	9.0	3.55	2.6	3.3	2.65	2.7
28	12.5	20.1	3.8	6.5	13.0	3.5	5.95	4.4	2.45	2.65	5.85	2.9
29	9.8	.....	3.6	6.7	13.0	4.4	4.9	7.45	2.5	2.55	7.45	4.2
30	9.0	.....	3.5	7.0	11.5	5.4	3.4	6.5	2.55	2.95	8.15	7.3
31	8.9	.....	3.4	.....	9.0	.....	4.75	5.75	.....	3.05	.....	9.2
1911												
1	10.4	14.9	16.5	8.4	15.4	4.8	6.2	1.8	1.8	15.5	4.0	7.1
2	11.6	14.4	16.3	6.1	19.2	3.8	4.4	1.9	1.8	15.9	3.8	7.9
3	12.5	13.7	14.7	5.2	20.4	3.0	3.6	1.9	1.7	16.1	3.7	6.9
4	12.6	11.4	11.3	5.0	21.1	3.1	3.4	1.9	1.7	16.5	3.6	6.5
5	12.0	7.6	8.4	9.2	21.6	3.0	3.0	1.9	1.9	17.5	3.5	6.0
6	11.9	6.0	6.8	13.6	21.6	3.2	3.6	2.0	3.0	20.0	3.8	5.6
7	11.8	7.4	6.3	15.6	21.4	3.2	2.3	2.0	4.7	23.4	7.4	5.2
8	9.0	8.9	9.7	16.8	20.3	4.1	2.3	2.1	4.1	24.2	8.2	4.9
9	7.5	10.2	14.0	14.0	19.7	3.8	2.2	2.0	3.9	24.3	9.6	4.2
10	6.6	11.1	15.5	11.5	16.4	3.6	2.2	2.0	5.0	24.2	11.5	5.7
11	5.7	9.7	15.8	8.2	11.1	4.0	2.2	2.0	4.1	24.0	12.2	8.9
12	6.2	7.4	15.8	6.3	7.4	3.8	2.3	1.9	4.1	23.7	11.8	11.2
13	6.5	6.3	16.0	9.3	6.4	3.6	2.8	2.6	4.7	23.2	13.3	15.0
14	7.2	5.8	16.1	16.5	4.4	3.4	3.1	2.4	5.0	22.7	13.8	16.2
15	11.1	5.1	16.3	19.4	4.3	2.6	3.0	2.2	5.3	21.3	13.0	16.8
16	12.8	5.6	16.0	19.7	4.1	2.4	2.5	2.0	5.1	20.2	14.7	16.4
17	12.9	7.3	13.3	19.9	4.0	2.4	2.3	1.9	8.5	17.0	14.4	13.1
18	12.0	9.1	8.3	19.8	3.8	2.5	2.2	1.9	12.2	11.5	13.8	13.9
19	11.0	14.7	5.8	20.1	3.7	4.1	2.2	1.9	13.9	7.9	13.0	14.1
20	8.2	17.3	5.4	20.9	3.6	5.8	2.1	1.9	14.4	6.5	12.2	13.8
21	6.6	18.0	6.2	21.2	3.5	8.0	2.2	1.8	15.0	4.6	13.4	12.3
22	6.0	18.6	5.8	21.1	3.5	6.4	2.0	1.8	15.1	4.8	14.4	11.8
23	6.2	18.9	5.5	20.8	3.3	4.2	2.0	1.8	15.0	4.9	14.3	13.2
24	6.4	18.8	5.5	20.3	3.2	3.5	2.0	1.8	14.8	4.1	13.9	13.4
25	5.8	18.4	5.4	19.8	4.3	3.2	1.9	2.3	14.2	3.9	11.4	13.1
26	6.2	17.9	5.5	19.3	4.8	3.3	2.0	2.2	11.1	7.2	8.3	12.8
27	6.6	17.6	5.8	18.0	4.5	5.8	1.9	2.1	11.4	8.5	7.4	11.0
28	8.9	17.3	6.4	14.0	3.6	8.4	1.9	2.0	13.3	7.5	6.2	8.6
28	12.1	.....	9.4	9.0	3.3	8.8	1.8	2.0	14.2	5.5	6.7	8.1
30	14.0	.....	11.0	13.6	3.1	7.7	1.8	1.9	14.9	4.7	6.2	8.9
31	14.9	.....	10.3	.....	4.0	.....	1.8	1.9	.....	4.2	.....	9.4

NOTE—Ice conditions existed December 8–31, 1909. Ice was three inches thick on December 31, 1909. No ice reported by observer in 1910. Observer reported river full of "loose" ice January 5, 1911, and full of "floating" ice January 6, 1911. Relation of gage height to discharge probably not affected by ice during 1910–11.

LITTLE WABASH RIVER AT CARMI, ILLINOIS

Location.—At highway bridge at northeast edge of Carmi, Ill., about one-quarter mile below the Big Four and Louisville and Nashville Railroad bridges, and about 4½ miles below the mouth of Skillet Fork River.

Records available.—October 9, 1908, to December 31, 1911.

Drainage area.—Three thousand and ninety square miles.

Gage.—Standard chain gage attached to bridge; datum unchanged.

Channel.—Probably permanent. Location of control not known.

Discharge measurements.—Made from downstream side of bridge.

Floods.—The following high water marks have been preserved: 1875, 33.5 feet; about 1895, 34.0 feet; 1897, 34.5 feet; 1898, 36.0 feet; all based on present gage datum. These gage heights are authentic but there is a possibility that some of the dates are erroneous.

Winter flow.—Ice does not affect the flow in ordinary winters.

A. Low water

B High water

Little Wabash River at Carmi, Ill.

Accuracy.—Backwater occurs at this station and reliable estimates of discharge cannot be made.

DISCHARGE MEASUREMENTS OF LITTLE WABASH RIVER AT CARMI, ILLINOIS, IN 1909–11

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1909		*Feet*	*Sq.-ft.*	*Feet*	*Sec.-ft.*
May 1	H. J. Jackson	222	2,290	13.30	4,880
May 2	H. J. Jackson	187	1,080	7.61	2,140
November 12	H. J. Jackson	125	115	1.88	65
1910					
June 10	C. T. Bailey	156	324	3.54	757
December 14	Bailey and Monk	132	137	2.01	137
1911					
March 6	P. S. Monk	169	624	5.14	1,340
October 26	Monk and Brown	144	202	2.66	362

DAILY GAGE HEIGHT, IN FEET, OF LITTLE WABASH RIVER AT CARMI, ILLINOIS, FOR 1908–11

[Observer, Noah Weigant]

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.7	2.0
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.7	2.0
3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.6	1.9
4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.6	1.9
5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.6	1.9
6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.6	1.9
7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.6	2.0
8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.6	2.2
9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.6	2.2
10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.6	2.2
11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.6	2.1
12	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.7	1.7	2.0
13	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.7	1.7	2.0
14	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.7	1.7	2.0
15	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.7	1.7	1.9
16	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.8	1.7	1.9
17	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.8	1.7	1.9
18	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.8	1.7	1.9
19	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.8	1.7	1.9
20	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.8	1.7	1.9
21	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.1	1.7	1.9
22	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.9	1.7	1.9
23	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.8	1.7	1.9
24	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.8	2.0	1.9
25	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.7	2.0	1.9
26	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.7	2.1	1.8
27	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.7	2.1	1.8
28	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.7	2.1	1.8
29	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.7	2.1	1.8
30	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.7	2.0	1.9
31	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.7	.....	1.9
1909												
1	1.8	2.3	23.3	3.2	12.7	4.8	4.6	2.4	1.8	2.2	2.3	3.4
2	1.8	2.3	23.65	2.9	7.75	3.8	4.1	2.6	1.8	2.1	2.2	2.85
3	1.9	2.2	23.65	2.7	5.4	3.2	3.7	3.5	1.8	2.0	2.1	2.6
4	1.9	2.5	23.45	2.6	4.75	5.8	3.5	3.7	1.8	2.0	2.0	2.45
5	2.3	3.1	22.9	2.5	4.6	6.8	3.0	3.7	1.8	1.9	2.0	2.4
6	2.6	3.0	21.7	2.4	4.7	9.0	2.6	3.3	1.8	1.9	1.9	2.35
7	2.4	2.7	19.45	3.0	5.2	10.8	2.5	2.6	1.8	1.8	1.9	2.35
8	2.2	2.7	17.75	4.0	5.8	11.7	2.7	2.4	1.8	1.8	1.9	2.3
9	2.0	2.9	22.35	3.9	6.5	11.7	2.5	2.2	1.8	1.8	1.9	2.25
10	2.0	3.3	23.0	4.0	6.9	10.6	3.3	2.1	2.2	1.8	1.9	2.3
11	2.2	4.5	22.8	5.8	7.1	7.9	6.1	2.1	2.4	1.7	1.8	2.8
12	2.3	4.9	23.85	6.9	6.9	5.2	7.9	2.0	2.4	1.7	1.8	4.5
13	2.1	5.7	25.55	9.4	6.8	7.1	6.0	2.0	3.0	1.7	2.0	6.3
14	1.9	8.15	26.9	12.9	7.5	9.1	15.7	1.9	3.3	1.7	2.2	10.05

DAILY GAGE HEIGHT, IN FEET, OF LITTLE WABASH RIVER AT CARMI, ILLINOIS, FOR 1908-11—*Continued*

Day	Jan.	Feb	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
15	1.9	12.4	27.75	13.7	7.5	9.3	14.0	1.9	3.0	1.7	2.3	12.1
16	1.9	13.45	28.1	14.5	6.5	9.1	19.9	1.9	2.6	1.7	3.0	13.05
17	1.9	13.7	28.05	15.2	5.3	8.3	18.6	1.9	2.4	1.7	4.15	13.9
18	1.9	14.2	27.6	15.75	5.5	7.1	16.4	1.9	2.2	1.7	4.7	14.35
19	1.9	16.45	27.0	16.25	5.1	5.3	14.1	1.9	2.1	1.8	5.3	14.75
20	1.8	17.65	26.1	19.4	4.2	3.8	12.7	1.9	2.0	1.9	6.5	14.75
21	1.9	17.2	24.9	20.85	3.4	3.4	11.8	1.9	1.9	2.0	6.5	13.9
22	1.9	16.85	23.15	21.4	3.0	3.4	11.0	1.8	2.1	2.0	5.4	13.25
23	1.9	20.8	20.5	21.5	2.7	3.4	10.5	1.8	2.0	2.4	4.3	12.5
24	2.0	22.3	15.95	21.6	2.5	3.3	10.2	1.8	2.0	2.7	3.65	10.0
25	2.0	21.95	9.8	21.55	2.6	4.7	9.8	1.8	2.1	3.0	5.2	6.0
26	2.3	21.8	5.0	21.3	2.6	6.8	8.8	1.8	2.4	3.0	7.3	3.8
27	2.4	22.15	3.55	20.5	5.5	6.3	6.0	1.8	2.7	3.0	8.4	3.15
28	2.4	22.7	3.2	19.2	5.2	5.5	3.6	1.8	2.7	2.9	7.95	2.95
29	2.5	.....	3.45	16.9	5.0	5.0	2.9	1.8	2.5	2.7	6.55	3.15
30	2.5	.....	3.7	17.05	6.3	4.7	2.6	1.8	2.3	2.6	4.7	3.15
31	2.4	.....	3.4	.....	6.0	.....	2.4	1.8	.....	2.4	.....	3.0
1910												
1	2.3	11.4	19.9	2.25	4.65	4.5	2.85	2.45	3.4	2.1	2.15	5.35
2	2.4	9.4	20.3	2.25	4.55	3.25	3.4	2.35	2.75	2.2	2.2	4.3
3	2.5	6.7	21.35	2.25	5.25	3.2	3.3	2.25	2.35	2.25	2.1	4.4
4	2.7	4.1	22.9	2.25	4.55	3.1	3.0	2.2	2.8	7.75	2.05	4.2
5	3.5	3.5	24.2	2.2	3.6	3.05	3.4	2.15	6.85	16.9	2.1	3.65
6	4.7	4.25	25.5	2.2	3.1	2.6	4.1	2.1	8.68	22.75	2.05	3.0
7	4.9	5.5	26.4	2.15	3.05	2.5	5.0	2.05	11.15	23.2	2.05	2.55
8	5.0	5.5	26.95	2.15	4.3	2.4	6.1	2.0	12.2	23.0	2.0	2.45
9	5.45	4.9	27.15	2.2	4.75	3.25	6.7	2.0	13.8	23.2	2.0	2.3
10	5.1	4.1	27.05	2.3	4.0	3.5	7.0	2.0	13.95	23.9	1.95	2.25
11	4.55	3.35	26.7	2.35	3.7	3.25	6.25	1.95	13.35	24.6	1.95	2.15
12	3.5	3.1	26.1	2.55	5.05	2.8	5.9	1.95	12.7	25.25	2.0	2.1
13	6.3	2.8	25.2	2.7	5.55	2.6	4.65	1.9	11.6	25.7	1.95	2.1
14	11.15	2.75	24.0	3.0	5.05	2.45	4.0	1.9	9.3	25.85	2.0	2.0
15	12.45	2.7	22.15	3.3	5.65	2.55	3.75	1.9	5.85	25.85	1.9	2.0
16	13.0	2.7	19.0	3.45	6.35	2.5	3.8	1.9	3.7	25.6	1.9	1.95
17	13.7	2.8	13.8	4.65	6.55	2.4	3.75	1.85	3.0	25.3	1.85	2.0
18	15.6	2.8	8.0	5.35	5.55	2.25	4.4	1.85	2.55	24.75	1.9	2.0
19	16.4	2.7	3.9	6.95	4.3	2.2	6.85	2.1	2.4	23.95	1.85	2.0
20	16.75	3.3	2.9	7.8	4.0	2.1	9.1	1.95	2.25	22.9	1.9	2.0
21	17.3	3.95	2.75	7.55	3.45	2.1	10.15	2.0	2.2	21.45	1.85	2.0
22	17.9	5.3	2.6	6.3	3.05	2.1	10.2	2.05	2.1	19.35	1.85	1.9
23	18.35	8.05	2.55	5.0	3.25	2.65	9.55	2.5	2.0	15.6	1.9	2.0
24	18.5	9.35	2.5	3.95	4.25	3.25	9.0	2.55	2.05	10.55	1.85	2.0
25	18.35	11.1	2.45	3.65	5.1	2.95	8.9	2.7	1.95	5.3	1.9	1.95
26	17.65	12.4	2.45	3.55	6.5	2.55	10.9	2.6	2.0	3.25	1.85	1.95
27	16.8	16.65	2.4	4.3	7.45	2.4	8.6	2.7	2.0	2.65	1.85	2.0
28	15.7	19.4	2.35	4.8	7.75	2.35	5.95	2.6	2.3	2.5	2.15	2.05
29	14.15	.....	2.35	4.85	7.65	2.3	4.0	2.35	2.25	2.35	2.95	2.3
30	13.25	.....	2.3	4.75	7.3	2.3	3.15	3.45	2.2	2.25	5.2	3.45
31	12.5	.....	2.3	.....	6.4	.....	2.75	3.9	.....	2.25	.....	5.25
1911												
1	6.7	9.0	14.45	6.3	20.6	2.45	4.3	1.75	1.75	9.6	2.75	4.4
2	7.3	10.1	13.2	4.8	20.3	2.5	3.45	1.9	1.75	10.6	2.6	4.05
3	8.3	10.1	12.0	3.9	19.65	2.5	2.85	1.8	1.75	10.9	2.4	3.9
4	8.5	9.8	10.4	3.3	19.4	2.5	2.5	1.75	1.8	10.95	2.3	3.7
5	8.7	8.95	8.1	3.65	19.95	2.6	2.3	1.7	1.8	11.4	2.25	3.45
6	8.5	8.8	5.7	6.8	20.45	2.9	2.25	1.9	1.95	12.0	2.35	3.05
7	7.8	9.3	4.75	9.5	20.75	2.6	2.15	1.8	2.2	12.75	2.4	2.9
8	6.95	9.85	5.9	11.4	20.75	2.4	2.05	1.75	2.5	13.8	2.5	2.75
9	5.65	10.2	7.8	11.8	20.45	2.5	1.95	1.7	2.65	14.8	2.7	2.65
10	4.4	10.35	10.15	10.75	19.6	3.1	1.9	1.7	2.75	15.9	5.6	2.65
11	3.65	10.1	11.45	9.3	17.75	2.8	1.85	1.8	3.05	17.2	6.3	2.85
12	3.45	9.45	11.85	7.9	13.2	2.6	1.8	1.85	2.85	17.7	5.8	3.4
13	3.3	8.05	11.4	8.05	8.0	2.4	1.8	1.85	2.8	17.3	4.6	7.65
14	3.0	6.15	10.8	17.0	4.32	2.25	1.8	1.9	2.9	17.15	4.7	8.15
15	4.1	4.75	10.4	18.15	3.18	2.15	2.0	1.9	3.1	16.75	7.6	8.9
16	5.9	3.65	9.55	18.1	2.90	2.05	2.05	1.9	3.2	16.4	9.1	9.3
17	7.1	4.05	8.45	18.55	2.65	2.0	2.05	1.95	3.8	15.3	9.35	9.4
18	7.6	5.05	7.1	19.2	2.5	2.4	2.0	1.95	4.15	13.15	9.05	9.35
19	7.6	8.6	5.35	19.7	2.4	2.8	1.9	1.95	6.55	10.1	8.3	9.1
20	6.9	14.95	3.65	20.45	2.3	3.1	1.85	1.95	8.4	7.9	7.45	9.05
21	5.65	16.1	3.15	20.4	2.25	3.3	1.8	1.9	9.05	5.95	7.9	9.3
22	4.45	16.2	3.05	20.35	2.25	4.0	1.8	1.9	9.35	4.35	8.3	9.75
23	3.85	16.4	3.25	20.35	2.25	3.5	1.7	1.9	9.4	3.3	8.95	10.3
24	3.65	16.75	3.1	20.0	2.2	2.95	1.7	1.9	9.05	2.75	8.85	10.65
25	3.65	16.95	3.0	19.2	2.3	2.55	1.7	1.85	8.65	2.45	8.15	10.95
26	3.65	16.85	2.9	17.85	2.4	2.3	1.7	1.85	6.05	2.5	7.1	10.35
27	3.7	16.40	2.9	16.45	2.5	2.25	1.65	1.85	6.65	3.5	5.4	9.0

DAILY GAGE HEIGHT, IN FEET, OF LITTLE WABASH RIVER AT CARMI, ILLINOIS, FOR 1908–11—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1911												
28	4.15	15.5	2.9	14.8	2.5	2.4	1.65	1.8	6.55	4.1	4.3	6.8
29	5.35	.....	3.5	13.05	2.45	3.9	1.7	1.8	7.35	3.7	3.7	5.05
30	6.7	.....	5.7	13.65	2.4	4.7	1.7	1.8	9.0	3.3	3.3	4.55
31	7.9	.....	6.85	.....	2.4	.....	1.7	1.8	.....	3.0	.....	5.15

NOTE—River frozen January 12, 1909. Ice conditions existed December 8–31, 1909. No ice conditions reported by observer in 1910–11.

SKILLET FORK RIVER NEAR WAYNE CITY, ILLINOIS

Location.—At Southern Railroad bridge 1 mile east of Wayne City, Ill., about 4 miles below the mouth of Horse Creek.

Records available.—August 16, 1908, to December 31, 1911.

Drainage area.—Four hundred and eighty-one square miles.

Gage.—Standard chain gage attached to bridge; datum has remained unchanged since date of establishment.

Channel.—Permanent, rough; remains of rock dam at section. Point of control at section.

Discharge measurements.—Made from downstream side of bridge, and also in high water from downstream side of wooden railroad trestle about 1 mile east of main channel. Low water measurements are made about 600 feet below regular section by wading, or from a boat.

Floods.—Maximum gage height since establishment of gage was 21.8 feet, on March 11, 1909. No records previous to establishment of gage are available.

Point of zero flow.—A determination by leveling October 28, 1911, indicates that there would be no flow past the gage if the river stage were to fall to about 1.5 foot, by the gage datum.

Winter flow.—Ice may affect the relation between gage height and discharge during portions of December, January, and February.

DISCHARGE MEASUREMENTS OF SKILLET FORK RIVER NEAR WAYNE CITY, ILLINOIS, IN 1908–11

Date	Hydrographer	Width	Area of section	Gage height	Discharge
		Feet	*Sq.-ft.*	*Feet*	*Sec.-ft.*
1908					
July 18	R. J. Taylor	19.5	36	2.2	*1
1909					
February 19	R. J. Taylor	136	1,150	12.36	1,430
March 11	W. M. O'Neil	648	5,140	20.75	8,260
November 10	H. J. Jackson	24	45	2.54	*4
1910					
March 1	Jackson and McChristie	652	4,980	20.72	6,050
March 1–2	Jackson and McChristie	652	5,000	20.72	†6,470
March 6	H. J. Jackson	138	1,050	11.90	980
March 7	H. J. Jackson	113	590	8.12	432
March 8	H. J. Jackson	92	287	5.26	222
March 9	H. J. Jackson	84	211	4.55	157
December 17	Bailey and Monk	17	10.8	2.32	‡2.9
1911					
March 8	P. S. Monk	134	1,020	11.87	1,150
October 29	Monk and Brown	44	46.6	2.60	§19

* Measurement made about 500 feet below regular section.
† This measurement is a combination of measurements made on March 1–2.
‡ Not at regular section.
§ Measurement made by wading just above regular section.

DAILY GAGE HEIGHT, IN FEET, OF SKILLET FORK RIVER NEAR WAYNE CITY, ILLINOIS, FOR 1908–11

[Observer, Evert Higdon.]

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1	.....	.....	.....	.....	.....	.....	.....	.....	2.0	1.7	2.0	2.3
2	.....	.....	.....	.....	.....	.....	.....	.....	2.0	1.6	1.9	2.4
3	.....	.....	.....	.....	.....	.....	.....	.....	2.0	1.6	1.8	2.2
4	.....	.....	.....	.....	.....	.....	.....	.....	2.0	1.7	1.6	2.1
5	.....	.....	.....	.....	.....	.....	.....	.....	2.0	1.9	1.9	2.1
6	.....	.....	.....	.....	.....	.....	.....	.....	2.0	1.7	1.7	2.2
7	.....	.....	.....	.....	.....	.....	.....	.....	2.0	1.9	1.8	2.3
8	.....	.....	.....	.....	.....	.....	.....	.....	2.0	1.8	1.9	2.4
9	.....	.....	.....	.....	.....	.....	.....	.....	2.0	1.6	2.0	1.9
10	.....	.....	.....	.....	.....	.....	.....	.....	2.0	1.7	1.8	1.8
11	.....	.....	.....	.....	.....	.....	.....	.....	1.9	1.8	1.7	1.7
12	.....	.....	.....	.....	.....	.....	.....	.....	1.9	1.9	1.9	1.9
13	.....	.....	.....	.....	.....	.....	.....	.....	1.9	1.8	2.0	2.1
14	.....	.....	.....	.....	.....	.....	.....	.....	1.9	1.8	1.9	1.9
15	.....	.....	.....	.....	.....	.....	.....	.....	1.8	1.7	1.8	1.8
16	.....	.....	.....	.....	.....	.....	.....	2.2	1.8	1.6	1.7	2.0
17	.....	.....	.....	.....	.....	.....	.....	2.2	1.8	1.7	1.6	1.8
18	.....	.....	.....	.....	.....	.....	.....	2.2	1.8	1.8	1.8	2.1
19	.....	.....	.....	.....	.....	.....	.....	2.2	1.8	1.9	1.9	2.0
20	.....	.....	.....	.....	.....	.....	.....	2.2	1.7	1.8	1.7	1.9
21	.....	.....	.....	.....	.....	.....	.....	2.2	1.7	1.6	1.8	2.0
22	.....	.....	.....	.....	.....	.....	.....	2.2	1.6	1.7	1.8	2.1
23	.....	.....	.....	.....	.....	.....	.....	2.2	1.6	1.9	1.7	2.2
24	.....	.....	.....	.....	.....	.....	.....	2.2	1.6	1.8	1.9	2.0
25	.....	.....	.....	.....	.....	.....	.....	2.2	1.7	1.6	2.0	1.9
26	.....	.....	.....	.....	.....	.....	.....	2.2	1.7	1.5	1.8	2.0
27	.....	.....	.....	.....	.....	.....	.....	2.1	1.6	1.7	1.6	2.0
28	.....	.....	.....	.....	.....	.....	.....	2.1	1.9	1.8	1.7	2.0
29	.....	.....	.....	.....	.....	.....	.....	2.0	1.8	1.6	2.7	1.8
30	.....	.....	.....	.....	.....	.....	.....	2.0	1.8	1.7	2.5	2.0
31	.....	.....	.....	.....	.....	.....	.....	2.0	.....	1.8	.....	2.1
1909												
1	2.1	2.7	5.0	2.8	3.2	3.4	3.9	8.2	2.0	2.4	2.6	2.9
2	2.1	2.6	4.1	2.6	2.8	3.0	3.8	3.2	2.1	2.3	2.7	2.8
3	2.1	2.8	3.5	2.4	2.7	4.2	3.6	3.1	2.2	2.3	2.7	2.7
4	2.1	2.7	3.2	2.6	2.6	11.2	3.4	3.0	2.1	2.2	2.8	2.7
5	2.2	2.6	3.2	2.8	2.8	14.1	3.0	2.8	2.1	2.2	2.8	2.7
6	2.2	2.9	2.6	2.7	2.6	16.3	2.4	2.6	1.9	2.2	2.7	2.85
7	2.1	3.1	3.1	4.0	2.7	7.5	2.4	2.9	1.9	2.2	2.6	2.9
8	2.0	4.2	3.6	5.6	2.8	4.5	2.4	2.7	2.0	2.1	2.6	2.9
9	2.1	4.2	3.1	7.7	2.9	3.3	3.3	2.5	4.2	2.0	2.6	3.0
10	2.0	4.9	21.1	5.6	3.0	3.2	3.9	2.5	4.9	2.0	2.55	3.1
11	2.1	4.9	21.8	4.8	3.2	3.0	4.2	2.4	3.5	2.0	2.55	3.15
12	2.2	4.6	21.3	4.2	3.6	2.9	9.2	2.3	3.0	1.9	5.65	3.6
13	2.2	4.9	20.6	5.6	4.0	6.8	9.5	2.3	3.1	1.9	8.15	17.6
14	2.2	8.5	19.6	16.5	4.8	8.5	10.3	2.2	2.8	1.9	8.3	18.8
15	2.3	11.6	12.0	19.6	8.6	7.8	13.4	2.1	2.6	2.0	5.8	18.7
16	2.3	17.4	5.6	19.0	8.4	3.6	4.1	2.2	2.5	2.0	5.85	18.0
17	2.0	9.3	4.1	18.2	6.2	5.4	3.7	2.2	2.4	2.0	9.4	13.3
18	2.1	7.5	3.5	12.2	3.5	4.3	3.5	2.2	2.3	2.1	10.9	6.7
19	2.2	7.5	3.1	5.2	3.4	6.8	2.9	2.1	2.3	2.1	8.5	5.0
20	2.2	18.4	2.9	12.4	2.8	4.3	3.0	2.1	2.3	4.1	5.4	4.7
21	2.9	17.2	2.6	18.3	2.5	2.6	3.6	2.0	2.4	4.2	3.9	3.55
22	2.8	13.0	2.9	19.0	2.3	2.8	3.1	2.0	2.9	4.7	3.4	3.0
23	2.9	18.2	2.6	19.2	2.0	2.6	2.9	2.1	5.1	3.2	4.85	2.9
24	2.9	20.6	2.5	18.3	2.5	6.4	2.7	2.2	5.7	5.2	10.3	2.8
25	2.8	20.3	2.7	17.4	2.5	4.6	2.6	2.1	3.7	4.7	10.9	2.7
26	2.9	18.0	2.8	11.3	2.5	4.5	2.5	2.2	3.0	3.3	5.8	2.5
27	2.7	13.0	2.7	8.5	11.2	4.4	2.5	2.2	2.8	3.1	4.3	2.55
28	2.6	7.1	5.2	3.2	14.1	4.6	2.4	2.0	2.7	2.8	3.5	2.5
29	2.9	.....	3.7	2.9	6.6	3.9	2.5	1.9	2.5	2.7	3.1	2.35
30	2.6	.....	3.1	3.3	6.3	4.0	6.5	1.9	2.4	2.6	3.0	2.4
31	2.9	.....	2.8	.....	6.4	.....	7.9	1.9	.....	2.6	.....	2.35
1910												
1	2.3	4.0	20.6	2.55	5.3	2.6	2.3	2.4	2.1	2.35	2.75	2.75
2	2.5	3.9	20.7	2.55	3.6	2.5	2.3	2.35	2.05	2.3	2.75	2.65
3	2.55	3.7	20.4	2.7	3.1	2.5	2.3	2.2	2.1	2.3	2.7	2.55
4	3.6	3.5	19.9	2.75	4.2	2.45	2.85	2.2	3.2	13.85	2.75	2.55
5	4.0	4.5	18.9	2.65	3.5	2.4	2.7	2.2	10.05	20.3	2.75	2.5
6	5.4	5.9	14.0	3.0	3.2	2.7	2.55	2.15	13.5	20.95	2.7	2.45
7	5.8	4.4	7.6	3.0	2.9	3.2	2.9	2.15	12.65	20.7	2.7	2.45
8	5.35	3.5	5.6	2.95	4.9	3.1	2.95	2.1	11.85	20.6	2.75	2.41
9	4.3	3.25	4.55	2.9	5.3	2.9	2.95	2.05	10.0	20.65	2.75	2.45
10	3.0	3.2	3.95	2.85	4.2	2.8	3.25	2.15	13.55	11.0	2.8	2.35
11	2.7	3.2	3.7	2.8	3.7	2.55	3.65	2.1	9.0	5.05	2.8	2.35
12	2.6	3.15	3.2	2.75	3.8	2.55	6.8	2.2	5.15	3.3	2.85	2.35
13	5.8	3.1	3.1	2.8	5.6	2.5	4.4	2.2	3.15	2.95	2.85	2.3

DAILY GAGE HEIGHT, IN FEET, OF SKILLET FORK RIVER NEAR WAYNE CITY, ILLINOIS, FOR 1908–11
—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1910												
14	17.0	3.15	3.0	2.8	5.0	2.5	2.95	2.1	2.9	2.85	2.85	2.3
15	17.7	3.1	2.95	2.7	4.7	2.5	2.8	2.15	2.65	2.8	2.8	2.25
16	16.7	4.3	2.9	2.8	3.2	2.4	2.65	2.05	2.65	2.7	2.85	2.25
17	15.7	4.7	2.8	7.15	3.0	2.4	2.65	2.05	2.55	2.7	2.8	2.25
18	16.0	5.3	2.75	5.9	2.7	2.4	11.9	2.0	2.5	2.6	2.8	2.3
19	17.9	5.8	2.7	5.25	2.05	2.35	13.05	2.1	2.45	2.6	2.9	2.35
20	17.6	6.0	2.75	4.25	2.8	2.35	9.5	2.2	2.4	2.55	2.8	2.35
21	12.9	7.2	2.7	3.85	2.7	2.3	3.45	2.2	2.4	2.6	2.85	2.3
22	10.3	10.2	2.7	3.5	2.65	2.3	3.3	2.15	2.25	2.6	2.9	2.3
23	9.8	13.6	2.65	3.1	3.1	2.25	2.9	2.15	2.25	2.55	2.85	2.3
24	5.4	11.6	2.65	3.5	9.1	2.25	2.65	2.05	2.65	2.5	2.85	2.35
25	4.7	10.3	2.65	4.5	8.1	2.25	2.6	2.2	3.05	2.6	2.85	2.35
26	4.25	7.6	2.7	4.7	5.5	2.25	2.5	2.15	3.0	2.6	2.85	2.35
27	4.8	18.6	2.7	5.8	3.9	2.25	2.45	2.15	2.65	2.65	2.85	2.35
28	5.7	20.5	2.65	6.9	3.6	2.2	2.4	2.05	2.5	2.7	2.85	2.35
29	6.0	.....	2.6	6.3	2.95	2.2	2.4	2.1	2.25	2.65	10.85	4.3
30	5.4	.....	2.6	5.8	2.8	2.25	2.5	2.05	2.4	2.75	5.25	7.1
31	4.6	.....	2.55	.....	2.7	.....	2.4	2.1	.....	2.7	.....	5.0
1911												
1	4.3	4.6	6.8	3.3	20.1	2.4	2.6	1.95	.....	8.5	2.4	3.7
2	8.1	3.4	5.3	3.0	20.5	2.4	2.5	2.1	.....	8.2	2.4	3.6
3	4.8	3.0	4.9	2.9	20.1	2.4	2.4	2.1	.....	11.05	2.4	3.2
4	4.5	2.7	4.6	3.3	19.5	2.4	2.4	2.1	.....	12.2	2.4	3.0
5	5.0	2.3	4.3	12.9	14.9	2.4	2.3	2.1	.....	10.05	.....	2.8
6	4.6	4.8	4.0	14.7	7.3	2.9	2.3	2.4	.....	5.65	.....	2.8
7	3.0	5.2	5.8	12.0	3.8	7.3	2.2	2.4	.....	3.65	.....	2.8
8	2.9	5.5	9.8	7.1	3.5	4.3	2.2	2.3	.....	4.25	.....	2.7
9	2.7	5.4	11.0	4.2	3.1	3.1	2.2	2.3	3.0	3.75	.....	3.6
10	2.7	4.6	11.3	3.9	2.9	2.9	2.2	2.3	4.4	4.4	.....	6.5
11	2.65	3.5	7.5	3.3	2.8	2.7	2.1	2.3	5.5	3.4	.....	9.9
12	2.3	3.1	5.25	3.2	2.6	2.5	2.1	2.2	3.8	3.1	6.4	10.1
13	3.0	2.9	4.7	7.9	2.5	2.4	2.1	2.2	3.0	2.7	11.8	9.2
14	3.65	3.0	3.8	19.2	2.7	2.4	2.1	2.2	2.8	2.6	10.2	6.5
15	3.8	3.4	3.3	19.6	2.6	2.3	2.0	2.2	2.8	2.5	7.3	5.2
16	3.9	4.3	3.0	18.9	2.6	2.3	2.0	2.2	5.3	2.5	5.4	5.6
17	3.95	4.4	3.0	15.7	2.5	2.3	2.0	2.1	7.2	2.4	4.6	9.6
18	3.9	5.65	2.9	7.7	2.5	2.3	2.0	2.1	9.8	2.5	7.5	9.2
19	3.1	8.9	2.85	6.0	2.5	2.4	2.0	2.1	7.8	2.4	8.6	6.5
20	2.9	18.7	2.75	10.4	2.5	2.8	2.0	2.1	8.9	2.4	6.4	5.7
21	2.9	17.6	2.85	10.5	2.5	2.6	2.0	2.2	6.8	2.5	5.5	10.5
22	2.8	13.5	2.8	9.6	2.5	2.5	2.0	.....	5.3	2.5	4.7	13.1
23	2.85	9.8	2.8	5.2	2.5	2.5	2.0	.....	3.5	2.6	3.8	12.5
24	2.8	7.6	2.75	4.0	2.4	2.4	2.0	.....	3.0	2.5	4.5	9.3
25	2.8	8.9	2.7	3.3	2.4	2.5	2.0	.....	2.8	2.7	4.8	6.8
26	3.2	8.7	2.7	3.1	2.4	3.1	2.0	.....	7.3	3.1	4.1	5.0
27	3.5	8.9	5.5	2.9	2.3	4.4	1.95	.....	10.0	2.8	3.8	5.2
28	5.0	8.7	7.9	3.0	2.3	4.3	1.95	.....	9.2	2.7	4.2	5.6
29	7.1	.....	6.8	4.1	2.3	3.2	1.95	.....	12.0	2.5	4.9	5.1
30	7.0	.....	5.0	18.0	2.3	2.8	1.95	.....	14.6	2.5	3.9	4.4
31	6.8	.....	3.9	.....	2.3	.....	1.95	.....	.....	2.5	.....	6.6

NOTE—Ice conditions existed December 8–31, 1909, and latter part of December, 1910. Gage read to top of ice December 25–26, 1910. Gage chain stolen August 23–September 8, 1911. Observer lost report November 5–11, 1911. Relation of gage height to discharge probably not affected by ice during 1911.

RATING TABLE FOR SKILLET FORK RIVER NEAR WAYNE CITY, ILLINOIS, FROM OCTOBER 9, 1908–DECEMBER 31, 1911

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
1.90	0.1	2.90	32	3.90	107	4.90	182
2.00	0.3	3.00	40	4.00	115	5.00	190
2.10	0.5	3.10	47	4.10	122	5.10	197
2.20	1.0	3.20	55	4.20	130	5.20	205
2.30	3	3.30	62	4.30	137	5.30	212
2.40	5	3.40	70	4.40	145	5.40	220
2.50	9	3.50	77	4.50	152	5.50	227
2.60	14	3.60	85	4.60	160	5.60	235
2.70	19	3.70	92	4.70	167	5.70	242
2.80	25	3.80	100	4.80	175	5.80	250

RATING TABLE FOR SKILLET FORK RIVER NEAR WAYNE CITY, ILLINOIS, FROM OCTOBER 9, 1908–DECEMBER 31, 1911—*Concluded*

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
5.90	257	10.00	760	14.10	1,850	18.20	4,095
6.00	265	10.10	778	14.20	1,890	18.30	4,180
6.10	274	10.20	796	13.30	1,930	18.40	4,265
6.20	283	10.30	814	14.40	1,970	18.50	4,350
6.30	293	10.40	832	14.50	2,010	18.60	4,435
6.40	303	10.50	850	14.60	2,050	18.70	4,525
6.50	313	10.60	870	14.70	2,090	18.80	4,615
6.60	323	10.70	890	14.80	2,130	18.90	4,705
6.70	333	10.80	910	14.90	2,175	19.00	4,800
6.80	343	10.90	930	15.00	2,220	19.10	4,900
6.90	354	11.00	950	15.10	2,265	19.20	5,000
7.00	365	11.10	971	15.20	2,310	19.30	5,100
7.10	376	11.20	992	15.30	2,355	19.40	5,200
7.20	387	11.30	1,014	15.40	2,400	19.50	5,300
7.30	398	11.40	1,036	15.50	2,450	19.60	5,400
7.40	409	11.50	1,058	15.60	2,500	19.70	5,500
7.50	420	11.60	1,082	15.70	2,550	19.80	5,600
7.60	431	11.70	1,106	15.80	2,600	19.90	5,700
7.70	442	11.80	1,130	15.90	2,650	20.00	5,800
7.80	453	11.90	1,155	16.00	2,700	20.10	5,900
7.90	464	12.00	1,180	16.10	2,750	20.20	6,005
8.00	475	12.10	1,205	16.20	2,800	20.30	6,110
8.10	487	12.20	1,230	16.30	2,855	20.40	6,215
8.20	499	12.30	1,255	16.40	2,910	20.50	6,330
8.30	511	12.40	1,280	16.50	2,965	20.60	6,425
8.40	523	12.50	1,310	16.60	3,020	20.70	6,530
8.50	535	12.60	1,340	16.70	3,075	20.80	6,635
8.60	547	12.70	1,370	16.80	3,130	20.90	6,740
8.70	559	12.80	1,400	16.90	3,190	21.00	6,850
8.80	572	12.90	1,430	17.00	3,250	21.10	6,960
8.90	586	13.00	1,460	17.10	3,310	21.20	7,070
9.00	600	13.10	1,490	17.20	3,375	21.30	7,185
9.10	614	13.20	1,525	17.30	3,440	21.40	7,300
9.20	630	13.30	1,560	17.40	3,505	21.50	7,415
9.30	646	13.40	1,595	17.50	3,570	21.60	7,530
9.40	662	13.50	1,630	17.60	3,640	21.70	7,645
9.50	678	13.60	1,665	17.70	3,710	21.80	7,760
9.60	694	13.70	1,700	17.80	3,780	21.90	7,880
9.70	710	13.80	1,735	17.90	3,855	22.00	8,000
9.80	726	13.90	1,770	18.00	3,930		
9.90	742	14.00	1,810	18.10	4,010		

NOTE—The above table is not applicable for ice or obstructed channel conditions. It is based on fifteen discharge measurements made during 1908–1911 and is fairly well defined between gage heights 2.2 feet and 12.0 feet, and poorly defined above 12.0 feet.

DAILY DISCHARGE, IN SECOND-FEET, OF SKILLET FORK RIVER NEAR WAYNE CITY, ILLINOIS, FOR 1908–11

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1									0.3	0.0	0.3	3.0
2									.3	.0	.1	5.0
3									.3	.0	.0	1.0
4									.3	.0	.0	.5
5									.3	.1	.1	.5
6									.3	.0	.0	1.0
7									.3	.1	.0	3.0
8									.3	.0	.1	5.0
9									.3	.0	.3	.1
10									.3	.0	.0	.0
11									.1	.0	.0	.0
12									.1	.1	.1	.1
13									.1	.0	.3	.5
14									.1	.0	.1	.1
15									.0	.0	.0	.0
16								1.0	.0	.0	.0	.3
17								1.0	.0	.0	.0	.0
18								1.0	.0	.0	.0	.5
19								1.0	.0	.1	.1	.3

DAILY DISCHARGE, IN SECOND-FEET, OF SKILLET FORK RIVER NEAR WAYNE CITY, ILLINOIS, FOR 1908–11 —*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
20	.....	.....	.....	.....	.....	.....	.....	1.0	0.0	0.0	0.0	.1
21	.....	.....	.....	.....	.....	.....	.....	1.0	.0	.0	.0	.3
22	.....	.....	.....	.....	.....	.....	.....	1.0	.0	.0	.0	.5
23	.....	.....	.....	.....	.....	.....	.....	1.0	.0	.1	.0	1.0
24	.....	.....	.....	.....	.....	.....	.....	1.0	.0	.0	.1	.8
25	.....	.....	.....	.....	.....	.....	.....	1.0	.0	.0	.3	.1
26	.....	.....	.....	.....	.....	.....	.....	1.0	.0	.0	.0	.3
27	.....	.....	.....	.....	.....	.....	.....	.5	.0	.0	.0	.3
28	.....	.....	.....	.....	.....	.....	.....	.5	.1	.0	.0	.3
29	.....	.....	.....	.....	.....	.....	.....	.3	.0	.0	19.0	.0
30	.....	.....	.....	.....	.....	.....	.....	.3	.0	.0	9.0	.3
31	.....	.....	.....	.....	.....	.....	.....	.3	.0	.0	.....	.5
1909												
1	0.5	19	190	25	55	70	107	499	.3	5.0	14	32
2	.5	14	122	14	25	40	100	55	.5	3.0	19	25
3	.5	25	77	5	19	130	85	47	1.0	3.0	19	19
4	.5	19	55	14	14	992	70	40	.5	1.0	25	19
5	1.0	14	55	25	25	1,850	40	25	.5	1.0	25	19
6	1.0	32	14	19	14	2,860	5	14	.1	1.0	19	28
7	.5	47	47	115	19	420	5	32	.1	1.0	14	32
8	.3	130	85	235	25	152	5	19	.3	.5	14	32
9	.5	130	47	442	32	62	62	10	130	.3	14	40
10	.3	182	6,960	235	40	55	107	10	182	.3	12	47
11	.5	182	7,760	175	55	40	130	5.0	77	.3	12	51
12	1.0	160	7,180	130	85	32	630	3.0	40	.1	238	85
13	1.0	182	6,420	235	115	343	678	3.0	47	.1	493	3,640
14	1.0	535	5,400	2,960	175	535	814	1.0	25	.1	511	4,620
15	3.0	1,080	1,180	5,400	547	453	1,600	.5	14	.3	250	4,520
16	3.0	3,500	235	4,800	523	85	122	1.0	10	.3	254	3,930
17	.3	646	122	4,100	283	220	92	1.0	5.0	.3	662	1,560
18	.5	420	77	1,230	77	137	77	1.0	3.0	.5	930	333
19	1.0	420	47	205	70	343	32	.5	3.0	.5	535	190
20	1.0	4,260	32	1,280	25	137	40	.5	3.0	122	220	167
21	32	3,380	14	4,180	10	14	85	.3	5.0	130	107	81
22	25	1,460	32	4,800	3.0	25	47	.3	32	167	70	40
23	32	4,100	14	5,000	.3	14	32	.5	197	55	178	32
24	32	6,420	10	4,180	10	303	19	1.0	242	205	814	25
25	25	6,110	19	3,500	10	160	14	.5	92	167	930	19
26	32	3,930	25	1,010	10	152	10	1.0	40	.62	250	10
27	19	1,460	19	535	992	145	10	1.0	25	47	137	12
28	14	376	205	55	1,850	169	5	.3	19	25	77	10
29	32	.....	92	32	323	107	10	.1	10	19	47	7
30	14	.....	47	62	293	115	313	.1	5.0	14	40	5
31	32	.....	25	.....	303	.....	464	.1	.....	14	.....	4
1910												
1	3	115	6,420	12	212	14	3	5	.5	4	22	22
2	9	107	6,530	12	85	9	3	4	.4	3	22	16
3	12	92	6,220	19	47	9	3	1	.5	3	19	12
4	85	77	5,700	22	130	7	28	1	55	1,750	22	12
5	115	152	4,700	16	77	5	19	1	769	6,110	22	9
6	220	257	1,810	40	55	19	12	.8	1,630	6,800	19	7
7	250	145	431	40	32	55	32	.8	1,360	6,530	19	7
8	216	77	235	36	182	47	36	.5	1,140	6,420	22	5
9	137	58	156	32	212	32	36	.4	760	6,480	22	7
10	40	55	111	28	130	25	58	.8	1,650	950	25	4
11	19	55	92	25	92	12	88	.5	600	194	25	4
12	14	51	55	22	100	12	343	1	201	62	28	4
13	250	47	47	25	235	9	145	1	51	36	28	3
14	3,250	51	40	25	190	9	36	.5	32	28	28	3
15	3,710	47	36	19	167	9	25	.8	16	25	25	2
16	3,080	137	32	25	55	5	16	.4	16	19	28	2
17	2,550	167	25	382	40	5	16	.4	12	19	25	2
18	2,700	212	22	257	19	5	1,160	.3	9	14	25	3
19	3,860	250	19	208	9	4	1,480	.5	7	14	32	4
20	3,640	265	22	134	25	4	678	1	5	12	25	4
21	1,430	387	19	104	19	3	74	1	5	14	28	3
22	814	796	19	77	16	3	62	.8	2	14	32	3
23	726	1,660	16	47	47	2	32	.8	2	12	28	3
24	220	1,080	16	77	614	2	16	.4	16	9	28	4
25	167	814	16	152	487	2	14	1	44	14	28	4
26	134	431	19	167	227	2	9	.8	40	14	28	4
27	175	4,440	19	250	107	2	7	.8	16	16	28	4
28	242	6,320	16	354	85	1	5	.4	9	19	28	4
29	265	.....	14	293	36	1	5	.5	2	16	920	137
30	220	.....	14	250	25	2	9	.4	5	22	208	376
31	160	.....	12	.....	19	.....	5	.5	.....	19	.....	190

RATING TABLE FOR SKILLET FORK RIVER NEAR WAYNE CITY, ILLINOIS, FROM OCTOBER 9, 1908–DECEMBER 31, 1911—*Concluded*

Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
Feet	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*	*Feet*	*Sec.-ft.*
5.90	257	10.00	760	14.10	1,850	18.20	4,095
6.00	265	10.10	778	14.20	1,890	18.30	4,180
6.10	274	10.20	796	13.30	1,930	18.40	4,265
6.20	283	10.30	814	14.40	1,970	18.50	4,350
6.30	293	10.40	832	14.50	2,010	18.60	4,435
6.40	303	10.50	850	14.60	2,050	18.70	4,525
6.50	313	10.60	870	14.70	2,090	18.80	4,615
6.60	323	10.70	890	14.80	2,130	18.90	4,705
6.70	333	10.80	910	14.90	2,175	19.00	4,800
6.80	343	10.90	930	15.00	2,220	19.10	4,900
6.90	354	11.00	950	15.10	2,265	19.20	5,000
7.00	365	11.10	971	15.20	2,310	19.30	5,100
7.10	376	11.20	992	15.30	2,355	19.40	5,200
7.20	387	11.30	1,014	15.40	2,400	19.50	5,300
7.30	398	11.40	1,036	15.50	2,450	19.60	5,400
7.40	409	11.50	1,058	15.60	2,500	19.70	5,500
7.50	420	11.60	1,082	15.70	2,550	19.80	5,600
7.60	431	11.70	1,106	15.80	2,600	19.90	5,700
7.70	442	11.80	1,130	15.90	2,650	20.00	5,800
7.80	453	11.90	1,155	16.00	2,700	20.10	5,900
7.90	464	12.00	1,180	16.10	2,750	20.20	6,005
8.00	475	12.10	1,205	16.20	2,800	20.30	6,110
8.10	487	12.20	1,230	16.30	2,855	20.40	6,215
8.20	499	12.30	1,255	16.40	2,910	20.50	6,330
8.30	511	12.40	1,280	16.50	2,965	20.60	6,425
8.40	523	12.50	1,310	16.60	3,020	20.70	6,530
8.50	535	12.60	1,340	16.70	3,075	20.80	6,635
8.60	547	12.70	1,370	16.80	3,130	20.90	6,740
8.70	559	12.80	1,400	16.90	3,190	21.00	6,850
8.80	572	12.90	1,430	17.00	3,250	21.10	6,960
8.90	586	13.00	1,460	17.10	3,310	21.20	7,070
9.00	600	13.10	1,490	17.20	3,375	21.30	7,185
9.10	614	13.20	1,525	17.30	3,440	21.40	7,300
9.20	630	13.30	1,560	17.40	3,505	21.50	7,415
9.30	646	13.40	1,595	17.50	3,570	21.60	7,530
9.40	662	13.50	1,630	17.60	3,640	21.70	7,645
9.50	678	13.60	1,665	17.70	3,710	21.80	7,760
9.60	694	13.70	1,700	17.80	3,780	21.90	7,880
9.70	710	13.80	1,735	17.90	3,855	22.00	8,000
9.80	726	13.90	1,770	18.00	3,930		
9.90	742	14.00	1,810	18.10	4,010		

NOTE—The above table is not applicable for ice or obstructed channel conditions. It is based on fifteen discharge measurements made during 1908–1911 and is fairly well defined between gage heights 2.2 feet and 12.0 feet, and poorly defined above 12.0 feet.

DAILY DISCHARGE, IN SECOND-FEET, OF SKILLET FORK RIVER NEAR WAYNE CITY, ILLINOIS, FOR 1908–11

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1									0.3	0.0	0.3	3.0
2									.3	.0	.1	5.0
3									.3	.0	.0	1.0
4									.3	.0	.0	.5
5									.3	.1	.1	.5
6									.3	.0	.0	1.0
7									.3	.1	.0	3.0
8									.3	.0	.1	5.0
9									.3	.0	.3	.1
10									.3	.0	.0	.0
11									.1	.0	.0	.0
12									.1	.1	.1	.1
13									.1	.0	.3	.5
14									.1	.0	.1	.1
15									.0	.0	.0	.0
16								1.0	.0	.0	.0	.3
17								1.0	.0	.0	.0	.0
18								1.0	.0	.0	.0	.5
19								1.0	.0	.1	.1	.3

DAILY DISCHARGE, IN SECOND-FEET, OF SKILLET FORK RIVER NEAR WAYNE CITY, ILLINOIS, FOR 1908–11 — *Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
20	.....	.....	.....	.....	.....	.....	.....	1.0	0.0	0.0	0.0	.1
21	.....	.....	.....	.....	.....	.....	.....	1.0	.0	.0	.0	.3
22	.....	.....	.....	.....	.....	.....	.....	1.0	.0	.0	.0	.5
23	.....	.....	.....	.....	.....	.....	.....	1.0	.0	.1	.0	1.0
24	.....	.....	.....	.....	.....	.....	.....	1.0	.0	.0	.1	.8
25	.....	.....	.....	.....	.....	.....	.....	1.0	.0	.0	.3	.1
26	.....	.....	.....	.....	.....	.....	.....	1.0	.0	.0	.0	.3
27	.....	.....	.....	.....	.....	.....	.....	.5	.0	.0	.0	.8
28	.....	.....	.....	.....	.....	.....	.....	.5	.1	.0	.0	.3
29	.....	.....	.....	.....	.....	.....	.....	.3	.0	.0	19.0	.0
30	.....	.....	.....	.....	.....	.....	.....	.3	.0	.0	9.0	.3
31	.....	.....	.....	.....	.....	.....	.....	.3	.0	.0	.....	.5
1909												
1	0.5	19	190	25	55	70	107	499	.3	5.0	14	32
2	.5	14	122	14	25	40	100	55	.5	3.0	19	25
3	.5	25	77	5	19	130	85	47	1.0	3.0	19	19
4	.5	19	55	14	14	992	70	40	.5	1.0	25	19
5	1.0	14	55	25	25	1,850	40	25	.5	1.0	25	19
6	1.0	32	14	19	14	2,860	5	14	.1	1.0	19	28
7	.5	47	47	115	19	420	5	32	.1	1.0	14	32
8	.3	130	85	235	25	152	5	19	.3	.5	14	32
9	.5	130	47	442	32	62	62	10	130	.3	14	40
10	.3	182	6,960	235	40	55	107	10	182	.3	12	47
11	.5	182	7,760	175	55	40	130	5.0	77	.3	12	51
12	1.0	160	7,180	130	85	32	630	3.0	40	.1	238	85
13	1.0	182	6,420	235	115	343	678	3.0	47	.1	493	3,640
14	1.0	535	5,400	2,960	175	535	814	1.0	25	.1	511	4,620
15	3.0	1,080	1,180	5,400	547	453	1,600	.5	14	.3	250	4,520
16	3.0	3,500	235	4,800	523	85	122	1.0	10	.3	254	3,930
17	.3	646	122	4,100	283	220	92	1.0	5.0	.3	662	1,560
18	.5	420	77	1,230	77	137	77	1.0	3.0	.5	930	333
19	1.0	420	47	205	70	343	32	.5	3.0	.5	535	190
20	1.0	4,260	32	1,280	25	137	40	.5	3.0	122	220	167
21	32	3,380	14	4,180	10	14	85	.3	5.0	130	107	81
22	25	1,460	32	4,800	3.0	25	47	.3	32	167	70	40
23	32	4,100	14	5,000	.3	14	32	.5	197	55	178	32
24	32	6,420	10	4,180	10	303	19	1.0	242	205	814	25
25	25	6,110	19	3,500	10	160	14	.5	92	167	930	19
26	32	3,930	25	1,010	10	152	10	1.0	40	.62	250	10
27	19	1,460	19	535	992	145	10	1.0	25	47	137	12
28	14	376	205	55	1,850	160	5	.3	19	25	77	10
29	32	.....	92	32	323	107	10	.1	10	19	47	7
30	14	.....	47	62	293	115	313	.1	5.0	14	40	5
31	32	.....	25	.....	303	.....	464	.1	.....	14	.....	4
1910												
1	3	115	6,420	12	212	14	3	5	.5	4	22	22
2	9	107	6,530	12	85	9	3	4	.4	3	22	16
3	12	92	6,220	19	47	9	3	1	.5	3	19	12
4	85	77	5,700	22	130	7	28	1	55	1,750	22	12
5	115	152	4,700	16	77	5	19	1	769	6,110	22	9
6	220	257	1,810	40	55	19	12	.8	1,630	6,800	19	7
7	250	145	431	40	32	55	32	.8	1,360	6,530	19	7
8	216	77	235	36	182	47	36	.5	1,140	6,420	22	5
9	137	58	156	32	212	32	36	.4	760	6,480	22	7
10	40	55	111	28	130	25	58	.8	1,650	950	25	4
11	19	55	92	25	92	12	88	.5	600	194	25	4
12	14	51	55	22	100	12	343	1	201	62	28	4
13	250	47	47	25	235	9	145	1	51	36	28	3
14	3,250	51	40	25	190	9	36	.5	32	28	28	3
15	3,710	47	36	19	167	9	25	.8	16	25	25	2
16	3,080	137	32	25	55	5	16	.4	16	19	28	2
17	2,550	167	25	382	40	5	16	.4	12	19	25	2
18	2,700	212	22	257	19	5	1,160	.3	9	14	25	3
19	3,860	250	19	208	9	4	1,480	.5	7	14	32	4
20	3,640	265	22	134	25	4	678	1	5	12	25	4
21	1,430	387	19	104	19	3	74	1	5	14	28	3
22	814	796	19	77	16	3	62	.8	2	14	32	3
23	726	1,660	16	47	47	2	32	.8	2	12	28	3
24	220	1,080	16	77	614	2	16	.4	16	9	28	4
25	167	814	16	152	487	2	14	1	44	14	28	4
26	134	431	19	167	227	2	9	.8	40	14	28	4
27	175	4,440	19	250	107	2	7	.8	16	16	28	4
28	242	6,320	16	354	85	1	5	.4	9	19	28	4
29	265	.....	14	293	36	1	5	.5	2	16	920	137
30	220	.....	14	250	25	2	9	.4	5	22	208	376
31	160	.....	12	.....	19	.....	5	.5	.....	19	.....	190

DAILY DISCHARGE, IN SECOND-FEET, OF SKILLET FORK RIVER NEAR WAYNE CITY, ILLINOIS, FOR 1908–11
—Concluded

Day	Jan.	Feb.	Mar.	Apr	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1911												
1	137	160	343	62	5,900	5	14	.2	.....	535	5	92
2	487	70	212	40	6,320	5	9	.5	.....	499	5	85
3	175	40	182	32	5,900	5	5	.5	.....	960	5	55
4	152	19	160	62	5,300	5	5	.5	.....	1,230	5	40
5	190	3	137	1,430	2,180	5	3	.5	.....	769	5	25
6	160	175	115	2,090	398	32	3	5	.....	238	54	25
7	40	205	250	1,180	100	398	1	5	.....	88	240	25
8	32	227	726	376	77	137	1	3	20	134	340	19
9	19	220	950	130	47	47	1	3	40	96	350	85
10	19	160	1,010	107	32	32	1	3	145	145	390	313
11	16	77	420	62	25	19	.5	3	227	70	450	742
12	3	47	208	55	14	9	.5	1	100	47	303	778
13	40	32	167	464	9	5	.5	1	40	19	1,130	630
14	88	40	100	5,000	19	5	.5	1	25	14	796	313
15	100	70	62	5,400	14	3	.3	1	25	9	398	205
16	107	137	40	4,700	14	3	.3	1	212	9	220	235
17	111	145	40	2,550	9	3	.3	.5	387	5	160	694
18	107	238	32	442	9	3	.3	.5	726	9	420	630
19	47	586	28	265	9	5	.3	.5	453	5	547	313
20	32	4,520	22	832	9	25	.3	.5	586	5	303	242
21	32	3,640	28	850	9	14	.3	.5	343	9	227	850
22	25	1,630	25	694	9	9	.3	1	212	9	167	1,490
23	28	726	25	205	9	9	.3	.....	77	14	100	1,310
24	25	431	22	115	5	5	.3	.....	40	9	152	646
25	25	586	19	62	5	9	.3	.....	25	19	175	343
26	55	559	19	47	5	47	.3	.....	398	47	122	190
27	77	586	227	32	3	145	.2	.....	760	25	100	205
28	190	559	464	40	3	137	.2	.....	630	19	130	235
29	376	.....	343	122	3	55	.2	.....	1,180	9	182	197
30	365	.....	190	3,930	3	25	.2	.....	2,050	9	107	145
31	343	.....	107	.....	3	.....	.2	.....	.....	9	.....	323

NOTE—Daily discharge August 23–September 8 and November 5–11, estimated, because of gage heights missing from observer's notes, by comparison with gage heights at Mill Shoals and discharge of adjacent drainage areas.

Mean discharge August 23–September 7, 1911, estimated, one second-foot.

The daily and monthly discharges published here differ from those published in United States Geological Survey Water Supply Papers Nos. 243, 263 and 283; and in the report of the Internal Improvement Commission of Illinois on Surface Water, 1908–10, because of revising rating curve on account of discharge measurements made in 1911.

MONTHLY DISCHARGE OF SKILLET FORK RIVER NEAR WAYNE CITY, ILLINOIS, FOR 1908–11

[Drainage area, 481 square miles]

Month	Discharge in second-feet				Run off—depth in inches on drainage area	Accuracy
	Maximum	Minimum	Mean	Per square mile		
1908						
August (16–31)	.....	.....	0.81	0.002	0.001	.....
September	0.3	0.0	.12	.0002	.0002	.....
October	.1	.0	.02	.00004	.00004	.....
November	19.0	.0	1.00	.002	.002	.....
December	5.0	.0	0.80	.002	.002	.....
1909						
January	32	0.3	9.90	0.021	0.02	.....
February	6,420	14	1,400	2.91	3.03	.....
March	7,760	10	1,180	2.45	2.82	.....
April	5,400	5	1,500	3.12	3.48	.....
May	1,850	.3	194	.403	.46	.....
June	2,860	14	338	.702	.78	.....
July	1,600	5	187	.389	.45	.....
August	499	.1	24.9	.052	.06	.....
September	242	.1	40.3	.084	.09	.....
October	205	.1	33.7	.070	.08	.....
November	930	12	231	.480	.54	.....
December	4,620	.3	633	1.32	1.52	.....
The year	7,760	0.1	473	0.984	13.33	

MONTHLY DISCHARGE OF SKILLET FORK RIVER NEAR WAYNE CITY, ILLINOIS, FOR 1908-11—*Concluded*

Month	Discharge in second-feet				Run off—depth in inches on drainage area	Accuracy
	Maximum	Minimum	Mean	Per square mile		
1910						
January	3,860	3	926	1.93	2.22	.....
February	6,320	47	655	1.36	1.42	.....
March	6,530	12	1,060	2.20	2.54	.....
April	382	12	105	.218	.24	.....
May	614	9	122	.254	.29	.....
June	55	1	10.5	.022	.02	.....
July	1,480	3	144	.299	.34	.....
August	5	.3	.94	.0020	.002	.....
September	1,650	.4	282	.586	.65	.....
October	6,800	3	1,150	2.39	2.76	.....
November	920	19	61.3	.127	.14	.....
December	376	2	27.9	.058	.07	.....
The year	6,800	.3	379	.788	10.69	.....
1911						
January	487	3	116	.241	.28	B.
February	4,520	3	567	1.18	1.23	B.
March	1,010	19	215	.447	.52	B.
April	5,400	32	1,050	2.18	2.43	C.
May	6,320	3	853	1.77	2.04	C.
June	398	3	40.2	.084	.09	C.
July	14	.2	1.60	.0033	.004	D.
August	5	.....	1.35	.0028	.003	D.
September	2,050	.....	290	.608	.67	C.
October	1,220	5	163	.339	.39	B.
November	1,130	5	253	.576	.59	B.
December	1,490	19	370	.769	.89	B.
The year	6,320	.....	324	0.674	9.14	.....

SKILLET FORK RIVER NEAR MILL SHOALS, ILLINOIS

Location.—At Baltimore and Ohio Southwestern Railroad bridge about 1 mile south of Mill Shoals, Ill., and 1½ miles below the mouth of Griffin Creek.

Records available.—October 9, 1908, to December 31, 1911.

Drainage area.—Nine hundred and twelve square miles.

Gage.—Standard chain gage attached to bridge; datum has remained unchanged since date of establishment.

Channel.—Probably permanent; old piles in bottom affect measurements at low stages. Point of control at section.

Discharge measurements.—Made from top of downstream plate girder of bridge and long wooden trestle approaches at each end.

Floods.—Maximum gage height since establishment of gage is 24.4, which occurred March 14, 1909. No records of floods previous to establishment of gage are available.

Point of zero flow.—Estimated to be at 1.0 foot gage height from an examination of the station at low water.

Winter flow.—Ice may affect the relation between gage height and discharge during portions of December, January, and February.

Accuracy.—Backwater conditions occur at this station and reliable estimates of flow cannot be made.

DISCHARGE MEASUREMENTS OF SKILLET FORK RIVER NEAR MILL SHOALS, ILLINOIS, IN 1909-11

Date	Hydrographer	Width	Area of section	Gage height	Discharge
1909		*Feet*	*Square feet*	*Feet*	*Second-feet*
May 3	H. J. Jackson	61	198	5.22	214
November 9	H. J. Jackson	38	31	2.26	11
1910					
March 1	Jackson & McChristie	791	3,400	19.65	3,440
March 3	H. J. Jackson	1,060	5,860	22.12	5,460
March 5	H. J. Jackson	1,067	7,010	23.11	5,640
March 8	H. J. Jackson	1,063	6,630	22.82	4,330
March 10	H. J. Jackson	1,058	5,500	21.80	3,380
March 12	H. J. Jackson	1,031	4,120	20.45	2,280
March 14	H. J. Jackson	141	1,450	18.03	1,440
March 15	H. J. Jackson	124	1,110	15.46	935
March 16	H. J. Jackson	91	660	11.43	519
March 17	H. J. Jackson	70	325	7.50	216
March 18	H. J. Jackson	59	150	4.70	117
December 14	Bailey & Monk	36	25.3	2.29	*10.8
1911					
March 3	P. S. Monk	71	417	8.61	561
March 9	P. S. Monk	99	715	12.15	1,320
October 27	Monk & Brown	27	37.5	1.88	†8.1

* Very slight ice conditions.
† Measurements made from temporary bridge about 100 feet below regular section.

DAILY GAGE HEIGHT, IN FEET, OF SKILLET FORK RIVER NEAR MILL SHOALS, ILLINOIS, FOR 1908-11

[Observer, J. A. Clow.]

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1908												
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.6
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.6
3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.6
4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.6
5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.6
6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.6
7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.6
8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.6
9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.6
10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.6
11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.6
12	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.5	1.6
13	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.5	1.6
14	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.5	1.6
15	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.5	1.6
16	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.5	1.6
17	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.5	1.6
18	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.5	1.6
19	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.5	1.6
20	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.5	1.6
21	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.5	1.6
22	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.5	1.6
23	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.5	1.6
24	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.5	1.6
25	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.5	1.6
26	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.9	1.6
27	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.6	1.6
28	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.6	1.6
29	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.6	1.6
30	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	1.6	1.6
31	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	.....	1.6
1909												
1	1.6	3.0	21.0	4.5	11.4	5.7	4.1	5.6	1.4	2.4	2.6	3.4
2	.....	3.0	20.1	3.7	8.8	4.5	3.7	6.4	1.4	2.2	2.6	3.3
3	.....	3.2	18.0	3.5	5.2	5.6	3.5	8.9	1.4	2.2	2.4	3.2
4	1.6	3.4	14.5	3.4	4.9	9.3	3.0	8.5	1.4	2.0	2.3	3.2
5	1.6	3.4	13.0	3.3	4.4	13.8	2.5	7.3	1.4	2.0	2.2	3.1
6	.....	4.0	12.5	4.8	4.1	14.6	2.5	3.5	1.4	2.0	2.2	2.9
7	1.6	4.3	10.5	8.4	3.9	14.5	2.5	3.4	1.4	2.0	2.2	2.7
8	.....	4.5	11.0	8.3	3.9	13.1	2.3	3.2	1.4	2.0	2.2	2.6
9	1.6	4.5	18.5	8.2	4.5	8.9	2.3	3.0	1.4	1.5	2.2	2.7

DAILY GAGE HEIGHT, IN FEET, OF SKILLET FORK RIVER NEAR MILL SHOALS, ILLINOIS, FOR 1908-11 —*Continued*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
10	.....	4.9	19.8	8.4	5.6	6.8	3.8	2.8	1.7	1.5	2.2	3.5
11	1.6	5.4	23.3	6.4	6.6	4.7	5.3	2.7	1.9	1.5	2.2	3.9
12	1.6	5.8	24.1	5.5	6.2	4.2	8.1	2.5	4.7	1.8	2.2	6.3
13	1.6	6.5	24.2	7.2	5.4	6.9	13.1	2.4	4.0	1.6	2.2	12.3
14	1.6	11.4	24.4	15.5	5.3	10.9	14.7	2.1	3.7	1.6	2.2	15.0
15	1.6	15.5	24.1	16.8	5.7	13.85	14.3	2.0	3.4	1.5	4.6	15.5
16	1.6	15.9	23.6	17.9	6.5	12.2	15.0	2.0	2.8	1.5	6.6	15.9
17	1.6	16.4	23.0	18.3	7.0	8.8	11.0	1.8	2.6	1.5	6.8	16.3
18	1.6	16.9	22.6	17.8	6.0	5.9	6.3	1.7	2.4	1.6	7.6	16.4
19	1.6	17.8	21.8	17.6	5.1	4.8	5.4	1.6	2.3	2.0	9.5	15.1
20	1.6	17.5	21.0	18.3	4.6	4.6	5.3	1.6	2.2	2.0	8.5	9.3
21	1.6	17.8	19.4	18.8	3.8	4.5	5.0	1.6	2.2	2.5	7.3	8.0
22	1.6	18.0	18.0	19.5	3.3	3.8	4.5	1.6	2.2	3.5	5.0	6.3
23	1.6	19.0	17.3	19.9	3.0	4.5	3.8	1.6	2.9	4.0	5.0	5.2
24	1.6	20.4	15.1	20.1	2.7	5.5	3.6	1.5	4.9	4.0	6.1	5.0
25	1.9	20.9	13.2	20.2	2.7	6.6	3.4	1.5	4.3	5.0	9.5	4.5
26	3.5	21.0	8.9	20.0	3.0	6.9	3.0	1.4	4.1	5.2	8.9	3.5
27	3.5	21.2	5.4	19.3	6.4	6.7	2.5	1.4	3.6	4.2	7.8	3.4
28	3.5	21.4	5.9	17.8	9.9	5.7	2.4	1.4	3.1	3.9	6.3	3.2
29	3.5	.....	5.9	14.8	12.4	5.5	2.2	1.4	2.8	3.5	5.2	3.1
30	3.3	.....	4.9	12.4	10.9	5.0	2.1	1.4	2.5	3.0	4.0	3.0
31	3.0	.....	4.5	.....	8.9	.....	2.5	1.4	.....	2.8	.....	3.0
1910												
1	3.1	5.5	19.8	2.8	6.2	3.1	1.7	3.6	1.65	2.45	3.0	5.8
2	3.3	5.0	21.2	2.7	5.4	2.9	1.7	3.5	1.65	2.4	2.85	4.05
3	3.4	4.8	22.3	2.7	5.0	2.6	1.8	3.15	1.7	2.35	2.85	2.95
4	3.4	4.8	22.9	2.6	4.5	2.5	2.9	2.8	2.75	13.75	2.75	2.95
5	4.1	5.4	23.3	2.5	4.4	2.5	4.9	2.55	9.6	18.4	2.75	2.75
6	5.0	6.0	23.4	2.6	4.4	2.4	3.85	2.0	14.35	19.95	2.5	2.8
7	6.5	6.0	22.9	2.6	4.4	2.2	3.8	2.0	15.35	22.2	2.45	2.65
8	7.0	5.8	22.7	2.8	4.3	3.1	3.5	1.85	15.9	23.35	2.35	2.65
9	6.9	4.9	22.2	3.5	4.2	3.5	3.35	1.9	16.65	24.15	2.25	2.65
10	6.8	4.4	21.6	3.4	4.4	3.7	3.0	1.75	16.3	24.3	2.15	2.65
11	5.0	4.3	21.0	3.3	4.6	3.6	2.85	1.8	15.85	24.25	2.2	2.4
12	4.2	4.0	20.4	3.3	5.5	3.0	3.8	1.7	13.75	23.9	2.15	2.35
13	11.4	4.0	19.6	3.7	6.0	2.9	4.5	1.55	11.8	23.65	1.95	2.25
14	13.5	3.9	17.5	4.05	6.4	2.6	5.25	1.6	7.85	23.35	1.85	2.15
15	14.9	3.9	14.8	4.4	6.05	2.4	4.8	1.55	5.15	23.1	1.85	2.2
16	15.4	4.7	10.7	4.7	5.3	2.3	3.85	1.6	4.8	22.35	1.9	2.2
17	16.3	4.5	6.0	8.4	4.5	2.3	4.8	1.5	3.65	21.8	1.85	2.1
18	16.5	5.1	4.3	9.5	4.2	2.2	7.5	1.65	3.3	21.05	1.75	2.1
19	16.9	5.4	3.8	9.0	3.9	2.0	9.85	1.7	2.95	21.8	1.75	2.0
20	17.3	5.6	3.8	8.3	3.6	1.9	10.2	1.65	2.55	21.25	1.75	2.0
21	17.3	7.1	3.4	7.0	3.4	1.8	10.65	1.6	2.6	19.95	1.8	2.1
22	16.9	9.2	3.4	6.5	3.2	1.7	8.9	5.1	2.35	19.3	1.65	2.1
23	16.7	13.4	3.3	6.3	7.2	1.7	4.5	4.05	2.4	13.35	1.65	2.2
24	15.3	14.4	3.2	6.0	8.1	1.6	4.25	3.0	2.35	9.45	1.65	2.2
25	11.3	14.3	3.2	5.9	9.3	1.6	4.1	2.55	2.45	5.85	1.65	2.2
26	8.6	13.5	3.2	5.65	9.3	1.6	4.15	1.9	3.0	4.55	1.6	2.2
27	7.7	17.4	3.2	6.9	7.1	1.6	4.3	1.8	4.45	3.5	1.55	2.2
28	7.0	19.3	3.1	7.8	5.0	1.5	4.4	1.75	3.0	3.15	5.75	2.6
29	6.8	.....	2.9	7.6	4.5	1.6	4.15	1.8	2.95	2.95	9.15	4.1
30	6.6	.....	2.8	7.0	4.0	1.6	4.0	1.75	2.85	2.95	7.75	8.2
31	6.2	.....	2.8	.....	3.5	.....	3.85	1.8	.....	2.95	.....	9.6
1911												
1	8.8	7.6	12.6	6.0	17.5	2.0	3.0	1.4	1.8	12.1	2.0	5.5
2	9.6	5.1	.....	5.3	19.8	2.0	2.9	1.4	1.8	11.9	2.0	5.3
3	10.6	5.0	8.4	4.8	20.5	1.9	2.6	1.4	1.8	11.5	1.8	5.0
4	9.7	4.9	7.0	4.9	21.4	2.0	2.1	1.4	1.8	11.9	1.8	4.9
5	8.6	5.1	6.7	7.6	21.7	2.2	2.0	1.4	2.4	12.1	1.8	4.8
6	7.4	6.8	6.4	11.3	21.4	2.4	2.0	1.4	2.8	11.5	1.9	3.8
7	5.7	7.9	7.5	13.5	21.2	2.9	2.0	1.4	3.0	.....	2.7	3.0
8	4.8	7.8	10.3	12.4	20.1	5.9	2.0	1.4	3.4	6.0	7.0	2.9
9	3.0	7.5	12.5	11.6	19.7	.....	1.9	1.4	4.0	6.3	8.0	2.6
10	3.1	6.9	12.7	8.3	18.1	3.9	2.6	1.5	4.7	6.6	7.8	2.4
11	3.9	6.1	12.0	7.6	15.9	3.7	4.9	1.6	5.3	6.9	8.1	4.8
12	4.1	5.1	9.3	5.2	11.3	3.0	3.9	1.7	5.7	7.6	8.7	7.7
13	4.2	4.9	7.0	13.9	6.1	2.9	3.4	1.7	4.9	7.5	7.3	10.7
14	3.1	4.8	6.0	15.6	5.2	2.8	3.0	1.7	4.6	7.0	10.2	9.8
15	3.0	5.1	5.6	18.3	4.9	2.4	2.9	1.7	4.4	6.3	9.8	8.7
16	3.0	5.9	4.5	19.0	3.5	2.0	2.6	1.8	3.8	5.7	8.9	7.0
17	.....	7.0	4.2	19.9	3.2	1.9	1.5	1.7	4.9	5.0	7.0	7.9
18	.....	8.4	4.0	20.0	3.0	2.0	1.5	1.7	8.2	3.9	8.0	10.1
19	.....	12.6	3.9	20.1	2.9	2.0	1.5	1.7	9.0	3.6	7.9	9.7
20	.....	17.0	3.8	20.2	2.9	2.0	1.5	1.7	9.0	2.4	7.6	9.0
21	.....	17.7	3.4	19.8	2.9	2.1	1.5	1.7	8.9	2.0	7.4	9.9
22	4.1	18.4	3.3	18.9	2.8	2.3	1.5	1.7	7.7	1.9	7.0	11.9

DAILY GAGE HEIGHT, IN FEET, OF SKILLET FORK RIVER NEAR MILL SHOALS, ILLINOIS, FOR 1908–11
—*Concluded*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1911												
23	4.1	18.9	3.2	17.9	2.6	2.6	1.4	1.7	6.5	1.8	6.9	10.7
24	5.6	18.8	3.0	15.3	2.5	2.9	1.4	1.7	5.7	1.7	6.3	12.7
25	5.0	18.0	3.0	12.0	2.4	2.6	1.4	1.7	4.8	1.6	5.0	11.3
26	4.9	17.6	3.5	8.2	2.3	2.2	1.4	1.7	3.5	1.4	4.5	10.4
27	4.1	16.1	4.6	6.9	2.2	2.2	1.4	1.7	5.9	1.6	5.0	8.6
28	6.1	14.1	5.9	5.2	2.1	3.6	1.4	1.7	9.8	2.8	4.9	6.0
29	7.7	.....	6.8	5.6	2.1	4.9	1.4	1.7	10.3	3.0	4.6	6.0
30	8.9	.....	7.6	15.4	2.1	3.8	1.4	2.5	11.4	2.9	4.5	6.0
31	8.6	.....	6.5	.....	2.0	.....	1.4	2.0	.....	2.5	.....	6.9

NOTE—Frozen conditions December 8 to 31, 1909, and January 7 to 14, 1910. Gage read to top of ice December 29 to 31, 1909, January 7, and 12 to 14, 1910. No ice reported by observer during 1911.

LIST OF MISCELLANEOUS DISCHARGE MEASUREMENTS MADE IN OHIO RIVER DRAINAGE BASIN IN ILLINOIS

Date	Stream	Locality	Width	Area of section	Mean velocity	Gage height	Discharge
1905			*Feet*	*Sq. ft.*	*Ft. per second*	*Feet*	*Sec.-ft.*
September 18	Vermilion River	Streator, Ill	65	40.8	0.21	3.75	8.5
1909							
August 9	Embarrass River	Hugo, Ill	104	245	0.11	*	26
1910							
April 11	Embarrass River	Lawrenceville, Ill	135	293	1.41	†	412
April 8	Embarrass River (North Fork)	Oblong, Ill	47	111	.33	‡	37

* Water surface was 22.71 feet below reference point which is a file mark on rivet just above hand rail, right side of third latticed vertical, sixty-two feet from face of left abutment on up-stream side of bridge, just south of Hugo.

† 22.12 feet to water surface from top edge of lowest horizontal cross plate on right side of center vertical post of truss on down stream side of bridge. Point is 2.2 feet above top of floor beam.

‡ 23.91 feet to water surface from top of upper channel of down stream hand rail, sixteen feet from face of right abutment.

PART II

PRECIPITATION

Since precipitation is the source of all stream flow a compilation of all the rainfall data collected in the State of Illinois by the United States Weather Bureau has been included in this report.

MEASUREMENT OF RAINFALL

The amount of rainfall is expressed in inches of depth upon a horizontal surface, snowfall being reduced to its equivalent amount of rainfall. The ordinary rain-gauge used by the United States Weather Bureau is illustrated in Fig. 1.

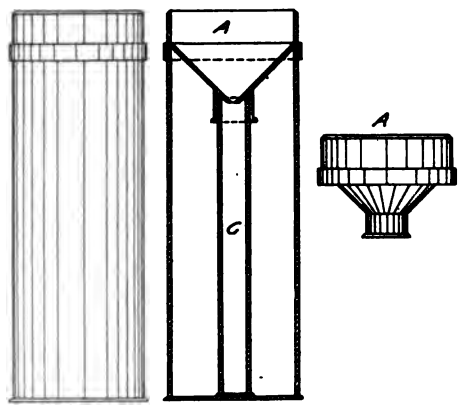


Fig. 1. Ordinary Rain-guage.

Fig. 1.—The diameter of the receiver A is 8 inches, the entire height of the instrument is 2 feet. The rim is beveled to a sharp edge and is accurately circular. The water which falls into the receiver runs down and through the funnel shaped bottom into the tube C, of one-tenth of the cross-section of the receiver; the amount of water collected is measured by inserting a properly graduated stick into the tube and reading the top of the wetted portion upon withdrawal. Large rainfalls overflow into the outer cylinder, which is used also for a collector of snow, the receiver A being removed during seasons of snowfall.

While the actual measurement of the amount of rainfall is comparatively simple it has been found that the position of the rain-gauge relatively to buildings, trees, or other objects, and its elevation above the surface of the ground, exerts a large influence upon the amount of water collected. Variations as large as 50 per cent have been observed, due to difference in location of the rain-gauge. The greater the eleva-

tion the less the amount of water collected, due to the greater wind velocity at the greater elevation.

For obtaining records of rates of rainfall, an automatic rain-gauge is used which gives practically a continuous record of the rainfall.

RAINFALL RECORDS IN ILLINOIS

The United States Weather Bureau has collected records at a large number of stations in the State of Illinois. In Table No. 3 will be found all the rainfall records of twelve months or more in length collected by the United States Weather Bureau in the State. There are included a few stations in the states adjoining Illinois. In all, there are 203 records included in this list; of this number, 191 are in Illinois, and the other twelve are in Wisconsin, Kentucky, Iowa, and Missouri. The five longest records and the mean annual rainfall for each period are given below:

Station	Length of record		Mean annual
	Period	Years	
St. Louis, Mo.	1837–1911.	75	39.83
Muscatine, Iowa	1846–1911.	66	37.58
Dubuque, Iowa	1851–1911.	61	33.61
Peoria, Ill.	1856–1911.	56	34.78
Fort Madison, Iowa	1856–1911.	56	37.29

Table No. 2 contains an alphabetical list of all the rainfall records published in this report and the period covered by each record. In general, stations with 1911 as the limiting date are being maintained at present.

Table No. 3 contains a list of the same rainfall records arranged according to drainage basins. Only the more important basins are used in the subdivision.

It should be noted that the mean annual rainfall as given for each station in Table No. 4 is the average of the yearly rainfalls and is not the sum of the twelve monthly means. The United States Weather Bureau, in computing the mean annual rainfall of a series of years, takes the sum of the monthly means as the mean annual rainfall, irrespective of whether or not the monthly means are the means of the same number of monthly values of the rainfall.

RAINFALL MAP OF ILLINOIS

On Plate No. 1 there is a map of Illinois on a scale of 12 miles to 1 inch, on which are shown lines of equal rainfall; location of all rainfall stations listed in Table No. 2; the location of all stream gaging stations for which data are published in this report; the boundaries of the major drainage basins in the State, and of the more important minor basins. The rainfall contours are based on the thirty-year mean for 1881 to 1910; those records which are not thirty years in length were extended to the period 1881-1910 for comparative purposes, as, very evidently, it would be incorrect to compare records of unequal lengths, as for example, a fifteen-year mean rainfall with a thirty-year mean rainfall. All rainfall stations in Illinois and those stations near Illinois in adjoining states with records eighteen years or more in length subsequent to 1880 were taken as reference stations. There are thirty-nine

of these stations in all, twenty-one of which have records from 1881 to 1910. The average length of the records of the other eighteen stations is twenty-three years. The mean annual rainfall for each of these eighteen stations was extended to that for the thirty-year period, 1881-1910, by Fournie's method, which is based on the simple assumption that the ratio between the rainfalls of two stations, subject to about the same climatological conditions, is constant. Rainfall records of different lengths may all be reduced to the length of any selected record by this method. For instance, if A and B are two rainfall records for the periods 1881 to 1910 and 1890 to 1910, respectively, and it is desired to obtain the mean annual rainfall at B for the period 1881 to 1910: Find the ratio of the mean for A from 1890 to 1910 to that at B for the same period; then, by applying this ratio to the mean at A for the period 1881 to 1910, the mean annual rainfall for B for the period 1881 to 1910 is obtained. The nearer the stations are together, and the nearer the length of the ratio determining period is to the length of the adopted period, the better will be the computed value of the rainfall, other conditions remaining the same.

All rainfall records of ten years or more in length in the period 1881 to 1910 were used in drawing the rainfall contours. Each rainfall station was located on the map, the reference stations being distinguished from the others. It was found that the reference stations were well distributed over the State. All the rainfall records less than thirty years in length were extended to the period 1881 to 1910 by Fournie's method, using the ratio as determined by a comparison of simultaneous records at the reference stations nearest to the stations in question; in some cases two or three values were obtained for one station by using the ratios from two or three reference stations, the mean being taken as the correct value. After all the means were extended to the period 1881 to 1910, the values were entered upon the map and the contours drawn in the usual manner.

Table No. 1 contains a list of all the rainfall records used in making the rainfall map. It shows the reference stations; the station from which each reference station was extended to the thirty-year mean where the reference station's record was less than thirty years in length; and the stations whose records were extended to the thirty-year period grouped under the reference stations from which the comparative ratios were determined. The table also gives the mean annual rainfall for the record used or available; the length of the period in years; the period; the ratio of the mean of the available record of each station to the mean of the reference station for the same period; and, finally, the computed or derived mean for the period 1881 to 1910 for those stations whose records are less than thirty years in length, a comparison of the second and last columns will show the change made in converting mean annual rainfalls for periods less than thirty years to a thirty-year mean. The maximum change shown is about 13 per cent.

The mean annual rainfall at 142 stations in all were used in locating the rainfall contours on the map. Of this number 39 are reference stations whose average length of records is 27 years, and 103 are stations whose average length of record is 17 years, whose mean annual rainfall for the period available was extended to the 30-year mean by Fournie's method.

The mean annual rainfall for the entire State for the period 1881-1910 as determined from the rainfall map on Plate I is 37.4 inches.

TABLE No. 1.

All rainfall stations given in the following table were used in making the rainfall map. Stations for which comparative ratios are given are grouped under the respective reference stations from which such ratios were derived:

Station	Mean annual rainfall	Length of record		Ratio of mean in given period to the mean for same period of reference station	Mean annual for 1881-1910
		Years	Period		
	Inches				
Aurora	35.9	30	1881-1910		35.9
St. Charles	36.6	15	1896-1910	1.03	37.0
Beloit, Wis	32.8	30	1881-1910		32.8
Brodhead, Wis	33.1	12	1898-1904; 1906-10	1.03	33.8
Delavan, Wis	30.3	12	1887-8; 1892-8; 1908-10	.93	30.6
Blandville, Ky. (Cairo)	49.6	29	1882-1910		49.3
Cobden	47.1	15	1896-1910	.94	46.2
Jackson, Mo	45.0	20	1891-1910	.92	45.4
Marble Hill, Mo	46.8	16	1894-1909	.97	47.7
New Madrid, Mo	51.9	17	1894-1910	1.02	52.9
Sikeston, Mo	48.2	15	1895-1909	.99	48.7
Carlinville (St. Louis, Springfield)	39.1	23	1883-5; 1891-1910		39.7
White Hall	37.5	15	1886-92; 1896-1908; 1904-5; 1909-10	.94	37.2
Charleston	38.3	30	1881-1910		38.3
Martinsville	37.4	17	1887; 1889-91; 1893-1900; 1906-10	1.03	39.6
Mattoon	38.5	23	1881-89; 1891-2; 1894-1905	1.01	38.5
Pana	41.8	25	1883-1892; 1896-1910	1.08	41.4
Philo	36.2	25	1886-1910	.98	37.6
Sullivan	37.5	10	1901-10	1.00	38.3
Windsor	37.9	10	1886-8; 1904-10	1.02	39.1
Chicago	32.9	30	1881-1910		32.9
Fort Sheridan	30.3	10	1890-99	1.005	33.0
Hammond, Ind	30.7	13	1898-1910	.97	31.9
Joliet	33.8	17	1894-1910	1.08	35.5
LaGrange	34.1	15	1895-1909	1.075	35.4
LaPorte, Ind	35.9	13	1898-1910	1.14	37.4
Valparaiso, Ind	31.9	15	1891-1905	1.06	35.0
Clinton, Iowa	34.9	30	1881-1910		34.9
Lanark	31.9	16	1895-1910	.92	32.2
Morrison	35.1	15	1896-1910	1.01	35.1
Zion	31.5	13	1895-7; 1901-10	.93	32.4
Davenport, Iowa	31.4	30	1881-1910		31.4
Dixon (Clinton, Iowa)	32.4	18	1893-1910		33.0
Ashton	32.9	12	1896-1906; 1908	.97	31.9
Dubuque, Iowa	32.4	30	1881-1910		32.4
Delaware, Iowa	30.5	19	1892-1910	.996	32.3
Lancaster, Iowa	30.2	16	1893-1905; 1907; 1909-10	1.025	33.2
Shullsburg	32.2	16	1891-4; 1897-8; 1901-10	1.065	34.5
Evansville, Ind	43.9	30	1881-1910		43.9
Earlington, Ky	47.5	21	1890-1910	1.125	49.4
Mt. Vernon, Ind	42.9	24	1887-1910	1.025	45.0
Owensboro, Ky	44.0	14	1897-1910	1.06	46.6
Princeton, Ind	40.6	26	1885-1910	.96	42.2

TABLE No. 1—*Continued*

Station	Mean annual rainfall	Length of record		Ratio of mean in given period to the mean for same period of reference station	Mean annual for 1881–1910
		Years	Period		
	Inches				
Flora[1]	39.2	24	1887–1910	.....	41.1
Carlyle	39.8	25	1886–1910	1.01	41.6
Cisne	40.6	12	1896–1907	1.065	43.8
Mt. Vernon	41.1	15	1896–1910	1.07	44.0
Olney	39.6	23	1888–1910	1.01	41.6
Fort Madison, Iowa	35.8	30	1881–1910	.....	35.8
Bonaparte, Iowa	34.5	20	1891–1910	.955	34.2
Burlington, Iowa	36.6	10	1901–10	1.01	36.2
Mt. Pleasant, Iowa	31.6	22	1889–1910	.88	31.6
Sigourney, Iowa	32.4	15	1896–1910	.86	30.8
Galva[2]	32.8	18	1893–1910	.....	34.2
Cambridge	34.8	13	1895–1907	1.02	34.8
Knoxville	36.4	14	1895–1906; 1908–9	1.04	35.6
Monmouth	33.9	15	1894–1910	1.01	34.6
Golconda	46.4	30	1881–1910	.....	46.4
Equality	43.8	15	1896–1910	.93	43.0
New Burnside	42.8	15	1896–1910	.905	42.0
Greenville (St. Louis, Mo.)	42.4	27	1883–6; 1888–1910	.....	42.8
Hillsboro	39.6	15	1896–1910	.97	41.6
Griggsville (Louisiana, Mo.)	35.8	26	1885–1910	.....	36.2
Rushville	34.6	19	1890–6; 1899–1910	1.005	36.3
Hannibal, Mo. (Louisiana, Mo.)	34.7	18	1893–1910	.....	36.1
Coatsburg	34.2	14	1897–1910	.....	34.9
Macon, Mo	38.2	10	1881–3; 1900–06	1.09	39.4
Steffenville, Mo	38.2	17	1893–96; 1898–1910	1.105	39.8
Henry	34.9	22	1887–92; 1895–1910	.....	35.6
Minonk	32.0	15	1896–1910	.89	31.7
Tiskilwa	36.4	14	1896–1909	.98	35.0
Ironton, Mo	46.6	30	1881–1910	.....	46.6
Keokuk, Iowa	34.2	30	1881–1910	.....	34.2
Coatsburg	36.5	14	1897–1910	1.045	35.8
Gorin, Mo	34.2	18	1893–1910	1.02	34.9
LaHarpe	38.5	15	1896–1910	1.105	37.8
Lafayette, Ind	38.4	30	1881–1910	.....	38.4
Delphi, Ind	37.6	25	1886–1910	1.00	38.4
Martinton	36.1	20	1886–89; 1895–1910	.97	37.2
Philo	36.2	25	1886–1910	.96	37.0
Rantoul	36.4	19	1892–1910	.95	36.4
Rockville, Ind	38.5	23	1888–1910	1.005	38.5
Louisiana, Mo	36.0	30	1881–1910	.....	36.0
Shelbina, Mo	38.4	23	1881–1903	1.09	39.2
McLeansboro (Evansville, Ind.)	40.5	27	1882–93; 1896–1910	.....	40.5
Equality	43.8	15	1896–1910	1.08	43.8
Madison, Wis	31.1	30	1880–1910	.....	31.1
Milwaukee, Wis	29.7	30	1881–1910	.....	29.7
Racine, Wis	28.6	14	1897–1910	.99	29.5
Waukesha, Wis	28.6	19	1892–1910	.98	29.2
Monticello, Iowa, (Davenport, Iowa)	32.6	25	1881–1905	.....	32.3
Amana, Iowa	32.7	25	1881–1905	1.005	32.4
Cedar Rapids, Iowa	31.6	24	1882–1905	.995	32.2
Mt. Carmel (Evansville, Ind.)	43.1	26	1885–1910	.....	44.9
Friendgrove	45.8	11	1896–1900; 1902–7	1.00	44.9

TABLE No. 1—*Concluded*

Station	Mean annual rainfall	Length of record		Ratio of mean in given period to the mean for same period of reference station	Mean annual for 1881–1910
		Years	Period		
	Inches				
Muscatine, Iowa	35.2	30	1880–1910		35.2
Aledo	33.0	10	1901–10	0.965	34.0
Wapello, Iowa	30.7	12	1899–1910	.935	33.0
Washington, Iowa	29.8	23	1888–1910	.88	31.0
Ottawa	34.0	24	1887–1910		34.8
Dwight	34.7	11	1897–1902; 1906–10	.98	34.0
Pontiac	30.6	12	1887–90; 1903–10	.97	33.7
Streator	33.1	15	1896–1910	.93	32.4
Palestine (Flora)	40.9	24	1887–1910		43.0
Martinsville	37.4	17	1887; 1889–91; 1893–1900; 1906–10	.895	38.5
Terre Haute, Ind	38.5	19	1892–1910	.93	40.1
Vincennes, Ind	43.9	16	1895–1910	1.05	45.2
Washington, Ind	43.6	13	1897–1909	1.035	44.5
Worthington, Ind	42.8	26	1883–1904; 1907–10	1.035	44.5
Peoria	34.4	30	1881–1910		34.4
Astoria	35.2	12	1899–1910	1.03	35.5
Bloomington	36.1	18	1893–1910	1.06	36.5
Bushnell	30.9	14	1893–97; 1899–1901; 1903–08	.94	32.4
Havana	33.7	16	1893–1901; 1904–10	1.03	35.4
Minonk	32.0	15	1896–1910	.93	31.9
Riley	32.7	30	1881–1910		32.7
Springfield	36.8	30	1881–1910		36.8
Alexander	33.9	15	1896–1910	.97	35.6
Decatur	37.2	17	1894–1910	1.07	39.4
Havana	33.7	16	1893–1901; 1904–10	.96	35.4
Loami	34.3	15	1896–1910	.98	36.0
Morrisonville	35.7	15	1896–1910	1.02	37.5
Mt. Pulaski	34.0	12	1894–1905	.99	36.4
St. John (St. Louis, Mo.)	39.0	20	1891–1910		40.1
Halfway	35.9	11	1894–96; 1899–1904; 1906–1909	.98	39.2
St. Louis, Mo.	37.5	30	1881–1910		37.5
Carlyle	39.8	25	1886–1910	1.08	40.6
Chester	42.6	16	1892; 1895; 1897–1910	1.15	43.0
Grafton	37.4	16	1895–1910	.99	37.1
Mascoutah	41.3	22	1884–1905	1.11	41.7
Oakfield	42.3	19	1892–1910	1.15	43.1
Tilden	39.3	23	1888–1910	1.08	40.5
Warrenton, Mo.	40.6	20	1891–1910	1.115	41.8
Sycamore (Riley)	35.0	29	1882–1910		35.7
St. Charles	36.6	15	1896–1910	1.04	37.0
Walnut (Clinton, Iowa)	33.8	19	1892–1910		34.4
Tiskilwa	36.4	14	1896–1909	1.05	36.0
Winnebago (Beloit, Wis.)	34.4	23	1888–1910		35.4
Lanark	31.9	16	1895–1910	.91	32.2
Rockford	35.6	21	1881–93; 1895–97; 1906–10	1.005	35.6
Yorkville	33.8	30	1881–1910		33.8
Joliet	33.8	17	1894–1910	1.01	34.1

[1] Flora was computed from Springfield, Evansville, and St. Louis, the mean of the three values being taken as the true value.

[2] Computed from Davenport and Peoria, the mean of the two values being taken as the true value.

NOTE—Stations in parentheses after reference stations indicate the stations from which the rainfall for the reference stations was extended to the 30 year period.

Table No. 2

Alphabetical List of all Rainfall Records as Published in this Report.

Abingdon, Knox County (see Knoxville).
Albion, Edwards County, 1856-60; 1887-88; 1894-1911.
Aledo, Mercer County, 1874-89; 1900-11.
Alexander, Morgan County, 1895-1911.
Alton, Madison County, 1891-93.
Andalusia, (or Edgington), Rock Island County, 1858-61; 1871-73.
Anna, Union County, (see Cobden).
Antioch, Lake County, 1900-11.
Ashton, Lee County, 1895-1909.
Astoria, Fulton County, 1898-1911.
Athens, Menard County, 1840-1877.
Atlanta, Logan County, 1882-84; 1895-97.
Atwood, Piatt County, (see Bement).
Augusta, Hancock County, 1856-1881.
Aurora, Kane County, 1857-61; 1865-73; 1879-1911.
Batavia, Kane County, (see St. Charles).
Beardstown, Cass County, 1885-1910.
Beason, Logan County, (see Lincoln).
Beloit, Rock County, (Wis.) 1866-1911.
Belvidere, Boone County, 1868-91.
Bement, Piatt County, 1887-1902; 1908-11.
Benton, Franklin County, 1887-89; 1902-10.
Blandville, Ballard County, (Ky.) 1871-1911.
Bloomington, McLean County, 1882-87; 1892-1911.
Bluffdale, Greene County, 1886-87.
Braidwood, Will County, (see Joliet).
Brighton, Macoupin County, (see Carlinville).
Brush Hill, Tazewell County, 1888-89.
Bunker Hill, Macoupin County, (see Carlinville).
Bushnell, McDonough County, 1881-82; 1892-1909.
Cairo, Alexander County, 1871-1911.
Cambridge, Henry County, 1873-88; 1895-1910.
Camden, Schuyler County, 1886-87.
Canton, Fulton County, 1880-82.
Carbondale, Jackson County, 1875-77; 1910-11.
Carlinville, Macoupin County, 1856-59; 1883-86; 1891-1911.
Carlyle, Clinton County, 1885-1911.
Carrollton, Greene County, (see White Hall).
Cazenovia, Woodford County, 1895-96.
Cedarville, Stephenson County, 1886-92.
Centralia, Marion County, 1878-92; 1899-1903.
Champaign, Champaign County, (see Urbana).
Charleston, Coles County, 1870-71; 1880-1911.
Chemung, McHenry County, 1894-1902.
Chester, Randolph County, 1891-1911.
Chicago, Cook County, 1867-1911.
Chicago Heights, Cook County, 1901-04.
Cisne, Wayne County, (see Fairfield).
Clear Creek, Marshall County, (see Henry).

TABLE No. 2—*Continued*

Clinton, Dewitt County, 1910-11.
Clinton, Clinton County, (Iowa), 1865-1911.
Coatsburg, Adams County, 1864-1911 (periods missing).
Cobden, Union County, 1875-86;1895-1911.
Colchester, McDonough County, 1903-09.
Collinsville, Madison County, 1883-93.
Cordova, Rock Island County, 1893-98.
Dakota, Stephenson County, 1909-11.
Danville, Vermilion County, 1895-1904; 1910-11.
Davenport, Scott County, (Iowa), 1871-1911.
Decatur, Macon County, 1875-86; 1892-1911.
Dixon, Lee County, 1886-88; 1892-1911.
Dubois, Washington County, 1864-75.
Dubuque, Dubuque County, (Iowa), 1851-1911.
Duquoin, Perry County, 1887-89; 1895-97; 1909-11.
Durand, Winnebago County, 1878-81.
Dwight, Livingston County, 1887-90; 1897-1911.
East Peoria, Tazewell County, 1890-98.
East St. Louis, St. Clair County, 1910-11.
Eberle, Effingham County, 1886-88.
Edington, Rock Island County, (see Andalusia).
Edwardsville, Madison County, 1910-11.
Effingham, Effingham County, 1892-1905.
Elgin Kane County, 1858-62; 1878-81; 1898-1900; 1906-07; 1910-11.
Ellsworth, McLean County, 1892-93.
Elmira, Stark County, (see Galva).
Equality, Gallatin County, 1895-1911.
Evanston, Cook County, 1858-76; 1885-91.
Ewing, Franklin County, 1886.
Fairfield, Wayne County, 1885-89; 1895-1911.
Fairmount, Cook County, 1892-93.
Fairview, Fulton County, 1886-88.
Fandon, McDonough County, (see Bushnell and Colchester).
Flora, Clay County, 1869-1911.
Fort Madison, Lee County, (Iowa), 1848-1911.
Fort Sheridan, Lake County, 1889-99.
Frederick, Schuyler County, 1895-96.
Friendgrove, Wabash County, 1895-1908.
Galva, Henry County, 1864-83; 1893-1911.
Geneseo, Henry County, (see Cambridge).
Gibson City, Ford County, 1885-90.
Gilman, Iroquois County, (see Martinton).
Glenwood, Cook County, 1895-1900.
Golconda, Pope County, 1866-70; 1878-1911.
Grafton, Jersey County, 1894-1911.
Grand Tower, Jackson County, 1885-91.
Grayville, White County, 1879-83; 1897-1901.
Greenville, Bond County, 1882-1911.
Griggsville, Pike County, 1882-1911.
Halfway, Williamson County, 1893-1910.

TABLE No. 2—*Continued*

Hallidayboro, Jackson County, 1891-1904.
Hannibal, Marion County, (Mo.) 1854-1911.
Havana, Mason County, 1870-78; 1892-1911.
Hennepin, Putnam County, (see Henry).
Henry, Marshall County, 1871-79; 1887-1910.
Herrin, Williamson County, (see Halfway).
Highland, Madison County, 1861-64.
Hillsboro, Montgomery County, 1895-1911.
Hoopeston, Vermilion County, 1887-88; 1901-11.
Hoyleton, Washington County, 1864-66.
Irishtown (near Breese), Clinton County, 1885-92.
Iron, White County, (see Equality).
Jacksonville, Morgan County, (see Alexander).
Joliet, Will County, 1887-88; 1893-1911.
Jordans Grove, Randolph County, (see Tilden).
Kankakee, Kankakee County, 1886-99.
Keokuk, Lee County, (Iowa), 1872-1911.
Kishwaukee, Winnebago County, 1899-1911.
Knoxville, Knox County, 1861-77; 1885-89; 1895-1909.
Lacon, Marshall County, 1887-91.
Lagrange, Cook County, 1892-1911.
La Harpe, Hancock County, 1856-81; 1895-1911.
Lake Forest, Lake County, 1886-90.
Lake Villa, Lake County, (see Antioch).
Lanark, Carroll County, 1887-1911.
La Salle, La Salle County, 1901-06; 1909-11.
Lebanon, St. Clair County, 1859-62; 1875.
Lexington, McLean County, 1895-99.
Liberty, Adams County, (see Coatsburg).
Lincoln, Logan County, 1888-1911.
Loami, Sangamon County, 1866-69; 1895-1911.
Louisiana, Pike County, (Mo.), 1878-1911.
Louisville, Clay County, (see Flora).
Lyndon, Whiteside County, (see Morrison).
McLeansboro, Hamilton County, 1882-1911.
Magnolia, Putnam County, 1866-68.
Mahomet, Champaign County, 1887-89.
Makanda, Jackson County, 1886-89.
Manchester, Scott County, 1854-74.
Martinsville, Clark County, 1887-1911.
Martinton, Iroquois County, 1885-1911.
Mascoutah, St. Clair County, 1882-1911.
Mattoon, Coles County, 1869-76; 1880-1906.
Melrose, Clark County, (see Martinsville).
Melvin, Ford County, 1885-87.
Minonk, Woodford County, 1886-87; 1895-1911.
Monmouth, Warren County, 1881-89; 1893-1911.
Monticello, Piatt County, (see Bement).
Morgan Park, Cook County, 1897-1902.
Morrison, Whiteside County, 1874-84; 1895-1911.

TABLE No. 2—*Continued*

Morrisonville, Christian County, 1896-1911.
Mount Carmel, Wabash County, 1876; 1884-1911.
Mount Morris, Ogle County, 1888-89.
Mount Pulaski, Logan County, (see Logan).
Mount Sterling, Brown County, 1867-80.
Mount Vernon, Jefferson County, 1895-1911.
Muddy Valley, Jackson County, (see Hallidayboro).
Muscatine, Muscatine County, (Iowa), 1846-1911.
Neponset, Bureau County, 1880; 1887.
New Athens, St. Clair County, 1887-88.
New Burnside, Johnson County, 1895-1911.
New Haven, Gallatin County, 1891-93.
Normal, McLean County, (see Bloomington).
Olney, Richland County, 1878-82; 1886-1911.
Oquawka, Henderson County, 1870-75; 1885-89.
Oneida, Knox County, (see Knoxville).
Orchard Farm, Peoria County, (see Pekin).
Oregon, Ogle County, 1893-97; 1909-11.
Osceola, Stark County, 1860-61.
Oswego, Kendall County, (see Yorkville).
Ottawa, La Salle County, 1856-70; 1886-1911.
Paducah, McCracken County, (Ky.), 1882-1911.
Palestine, Crawford County, 1882-1911.
Pana, Christian County, 1869-71; 1882-1911.
Paris, Edgar County, 1886-1911.
Payson, Adams County, (see Coatsburg).
Pekin, Tazewell County, 1855-65; 1886-90.
Peoria, Peoria County, 1855-1911.
Petersburg, Menard Co, 1882-89.
Philo, Champaign County, 1885-1911.
Plumhill, Washington County, 1896-1906.
Polo, Ogle County, 1882-85.
Pontiac, Livingston County, 1885-90; 1903-11.
Prairieville, Lee County, 1881-88.
Quincy, Adams County, (see Coatsburg).
Rantoul, Champaign County, 1881-1911.
Raum, Pope County, (see Golconda).
Reynolds, Rock Island County, 1896-98.
Richview, Washington County, 1885-89.
Riley (Marengo), McHenry County, 1850-1911.
Robinson, Crawford County, 1896-1911.
Rockford, Winnebago County, 1872-1911.
Rock Island, Rock Island County, 1866-92.
Rose Hill, Cook County, 1895-97.
Round Grove, Whiteside County, (see Morrison).
Rushville, Schuyler County, 1899-1911.
Sandwich, DeKalb County, 1858-91.
Savanna, Carroll County, 1899.
Scales Mound, Jo Daviess County, 1896-1902.
Shawneetown, Gallatin County, 1886-87; 1892-93.

TABLE No. 2—*Concluded*

Shobonier, Fayette County, (see Vernon).
Somonauk, DeKalb County, 1875-76.
Springfield, Sangamon County, 1840-1911.
St. Charles, Kane County, 1854-61; 1896-1911.
St. John, Perry County, 1887-1910.
St. Louis, St. Louis County, (Mo.), 1836-1911.
St. Marie, Jasper County, (see Olney).
St. Peter, Fayette County, 1910-11.
Staunton, Macoupin County, 1908-09.
Sterling, Whiteside County, 1878-81; 1886-89.
Strawn, Livingston County, 1899-1902.
Streator, LaSalle County, 1893-1911.
Sullivan, Moultrie County, 1899-1911.
Sumner, Lawrence County, 1886-89; 1909-11.
Swanwick, Perry County, 1881-86.
Sycamore, DeKalb County, 1881-1911.
Tampico, Whiteside County, (see Morrison).
Tilden, Randolph County, 1887-1910.
Tiskilwa, Bureau County, 1864-75; 1895-1910.
Toulon, Stark County, 1886-87.
Tuscola, Douglas County, 1909-11.
Upper Alton, Madison County, 1854-63; 1878-82.
Urbana, Champaign County, 1857-59; 1872-82; 1902-11.
Vandalia, Fayette County, 1886-89.
Vermont, Fulton County, (see Astoria).
Vernon, Marion County, 1899-1908.
Walnut, Bureau County, 1892-1911.
Warrensburg, Macon County, 1872-73.
Warsaw, Hancock County, 1856-1911 (fragmentary).
Waterloo, Monroe County, 1868-74.
Watseka, Iroquois County, (see Martinton).
Waukegan, Lake County, 1886-87.
Waverly, Morgan County, 1862-65.
Waynesville, DeWitt County, 1858-59.
Weir, Clark County, (see Martinsville).
Wellington, Iroquois County, (see Hoopeston).
West Salem, Edwards County, 1856-60.
Wheaton, DuPage County, 1857-60; 1886-1901.
White Hall, Greene County, 1884-1911.
Wilton Center, Will County, 1884-85.
Winchester, Scott County, 1887-89; 1897-1905.
Windsor, Shelby County, 1885-89; 1904-11.
Winnebago, Winnebago County, 1857-70; 1888-1911.
Woodstock, McHenry County, 1887-90.
York Neck, Adams County, (see Coatsburg).
Yorkville, Kendall County, 1880-1911.
Zion, Carroll County, 1894-1911.

TABLE No. 3

List of Rainfall Stations arranged according to Drainage Basins, giving limiting years of record.

Mississippi River Drainage Basin

Big Muddy River drainage basin:
- Benton, Franklin County, 1887-89; 1902-10.
- Carbondale, Jackson County, 1875-77; 1910-11.
- Cobden, Union County, 1875-86; 1895-1911.
- Dubois, Washington County, 1864-75.
- DuQuoin, Perry County, 1887-89; 1895-97; 1909-11.
- Ewing, Franklin County, 1886.
- Grand Tower, Jackson County, 1885-91.
- Halfway, Williamson County, 1893-1910.
- Hallidayboro, Jackson County, 1891-1904.
- Makanda, Jackson County, 1886-89.
- Mount Vernon, Jefferson County, 1895-1911.
- St. John, Perry County, 1887-1910.

Kaskaskia River drainage basin:
- Bement, Piatt County, 1887-1902; 1908-11.
- Carlyle, Clinton County, 1885-1911.
- Centralia, Marion County, 1878-92; 1899-1903.
- Greenville, Bond County, 1882-1911.
- Highland, Madison County, 1861-64.
- Hillsboro, Montgomery County, 1895-1911.
- Hoyleton, Washington County, 1864-66.
- Irishtown (near Breese), Clinton County, 1885-92.
- Lebanon, St. Clair County, 1859-62; 1875.
- Mascoutah, St. Clair County, 1882-1911.
- New Athens, St. Clair County, 1887-88.
- Pana, Christian County, 1869-71; 1882-1911.
- Plumhill, Washington County, 1896-1906.
- Richview, Washington County, 1885-89.
- St. Peter, Fayette County, 1910-11.
- Staunton, Macoupin County, 1908-09.
- Sullivan, Moultrie County, 1899-1911.
- Tilden, Randolph County, 1887-1911.
- Vandalia, Fayette County, 1886-89.
- Vernon, Marion County, 1899-1908.
- Waterloo, Monroe County, 1868-74.
- Windsor, Shelby County, 1885-89; 1904-11.

Illinois River drainage basin:

Sangamon River drainage basin:
- Atlanta, Logan County, 1882-84; 1895-97.
- Bloomington, McLean County, 1882-87; 1892-1911.
- Clinton, DeWitt County, 1910-11.
- Decatur, Macon County, 1875-86; 1892-1911.
- Ellsworth, McLean County, 1892-93.
- Gibson City, Ford County, 1885-90.

TABLE No. 3—*Continued*

Illinois River drainage basin—*Continued*

Sangamon River drainage basin—*Continued*

Lincoln, Logan County, 1888-1911.
Loami, Sangamon County, 1866-69; 1895-1911.
Mahomet, Champaign County, 1887-89.
Morrisonville, Christian County, 1896-1911.
Petersburg, Menard County, 1882-89.
Springfield, Sangamon County, 1840-1911.
Warrensburg, Macon County, 1872-73.
Waynesville, DeWitt County, 1858-59.

Illinois River drainage basin continued:

Alexander, Morgan County, 1895-1911.
Antioch, Lake County, 1900-11.
Astoria, Fulton County, 1898-1911.
Augusta, Hancock County, 1856-1881.
Aurora, Kane County, 1857-61; 1865-73; 1879-1911.
Beardstown, Cass County, 1885-1911.
Bluffdale, Greene County, 1886-87.
Brush Hill, Tazewell County, 1888-89.
Bushnell, McDonough County, 1881-82; 1892-1909.
Camden, Schuyler County, 1886-87.
Canton, Fulton County, 1880-82.
Carlinville, Macoupin County, 1856-59; 1883-86; 1891-1911.
Cazenovia, Woodford County, 1895-1906.
Colchester, McDonough County, 1903-09.
Dwight, Livingston County, 1887-90; 1897-1911.
East Peoria, Tazewell County, 1890-98.
Elgin, Kane County, 1858-62; 1878-81; 1898-1900; 1906-07; 1910-11.
Fairview, Fulton County, 1886-88.
Frederick, Schuyler County, 1895-96.
Griggsville, Pike County, 1882-1911.
Havana, Mason County, 1870-78; 1892-1911.
Henry, Marshall County, 1871-79; 1887-1911.
Joliet, Will County, 1887-88; 1893-1911.
Kankakee, Kankakee County, 1886-99.
Knoxville, Knox County, 1861-77; 1885-89; 1895-1909.
Lacon, Marshall County ,1887-91.
LaHarpe, Hancock County, 1895-1911.
LaSalle, LaSalle County, 1901-06; 1909-11.
Lexington, McLean County, 1895-99.
Magnolia, Putnam County, 1866-68.
Manchester, Scott County, 1854-74.
Martinton, Iroquois County, 1885-1911.
Minonk, Woodford County, 1886-87; 1895-1911.
Mount Sterling, Brown County, 1867-80.

TABLE No. 3—*Continued*

Illinois River drainage basin—*Concluded*

Neponset, Bureau County, 1880; 1887.
Orchard Farm, Peoria County, (see Pekin).
Osceola, Stark County, 1860-61.
Ottawa, LaSalle County, 1856-70; 1886-1911.
Pekin, Tazewell County, 1855-1865; 1886-90.
Peoria, Peoria County, 1855-1911.
Pontiac, Livingston County, 1885-90; 1903-11.
Rushville, Schuyler County, 1889-1911.
Sandwich, DeKalb County, 1858-91.
Somonauk, DeKalb County, 1875-76.
St. Charles, Kane County, 1854-61; 1896-1911.
Strawn, Livingston County, 1899-1902.
Streator, LaSalle County, 1893-1911.
Tiskilwa, Bureau County, 1864-75; 1895-1910.
Toulon, Stark County, 1886-87.
Waverly, Morgan County, 1862-65.
Wheaton, DuPage County, 1857-60; 1886-1901.
White Hall, Greene County, 1884-1911.
Wilton, Will County, 1884-85.
Winchester, Scott County, 1887-89; 1897-1905.
Woodstock, McHenry County, 1887-90.
Yorkville, Kendall County, 1880-1911.

Rock River drainage basin:

Ashton, Lee County, 1895-1909.
Beloit, Rock County, (Wis.), 1866-1911.
Belvidere, Boone County, 1868-91.
Cedarville, Stephenson County, 1886-92.
Chemung, McHenry County, 1894-1902.
Dakota, Stephenson County, 1909-11.
Dixon, Lee County, 1886-88; 1892-1911.
Durand, Winnebago County, 1878-81.
Kishwaukee, Winnebago County, 1899-1911.
Morrison, Whiteside County, 1874-84; 1895-1911.
Mount Morris, Ogle County, 1888-89.
Oregon, Ogle County, 1893-97; 1909-11.
Polo, Ogle County, 1882-85.
Prairieville, Lee County, 1881-88.
Reynolds, Rock Island County, 1896-98.
Riley (Marengo), McHenry County, 1850-1911.
Rockford, Winnebago County, 1872-1911.
Sterling, Whiteside County, 1878-81; 1886-89.
Sycamore, DeKalb County, 1881-1911.
Walnut, Bureau County, 1892-1911.
Winnebago, Winnebago County, 1857-70; 1888-1911.

TABLE No. 3—*Continued*

Mississippi River drainage basin, continued:

Aledo, Mercer County, 1874-89; 1900-11.
Alton, Madison County, 1891-93.
Andalusia (or Edgington), Rock Island County, 1858-61; 1871-73.
Cambride, Henry County, 1873-88; 1895-1910.
Chester, Randolph County, 1891-1911.
Clinton, Clinton County, (Iowa), 1865-1911.
Coatsburg, Adams County, 1864-1911 (periods missing).
Collinsville, Madison County, 1883-93.
Cordova, Rock Island County, 1893-98.
Davenport, Scott County, (Iowa), 1871-1911.
Dubuque, Dubuque County, (Iowa), 1851-1911.
East St. Louis, St. Clair County, 1910-11.
Edington, Rock Island County, (see Andalusia).
Edwardsville, Madison County, 1910-11.
Fort Madison, Lee County, (Iowa), 1848-1911.
Galva, Henry County, 1864-83; 1893-1911.
Grafton, Jersey County, 1894-1911.
Hannibal, Marion County, (Mo.), 1854-1911.
Keokuk, Lee County, (Iowa), 1872-1911.
Lanark, Carroll County, 1887-1911.
Louisiana, Pike County, (Mo.), 1878-1911.
Monmouth, Warren County, 1881-89; 1893-1911.
Muscatine, Muscatine County, (Iowa), 1846-1911.
Oquawka, Henderson County, 1870-75; 1885-89.
Rock Island, Rock Island County, 1866-92.
Savanna, Carroll County, 1899.
Scales Mound, JoDaviess County, 1896-1902.
Swanwick, Perry Co., 1881-86.
Upper Alton, Madison County, 1854-63; 1878-82.
Warsaw, Hancock County, 1856-1911 (fragmentary).
Zion, Carroll County, 1894-1911.

Ohio River drainage basin:

Wabash River drainage:

Embarrass River drainage:

Charleston, Coles County, 1870-71; 1880-1911.
Martinsville, Clark County, 1887-1911.
Mattoon, Coles County, 1869-76; 1880-1906.
Philo, Champaign County, 1885-1911.
Robinson, Crawford County, 1896-1910.
Sumner, Lawrence County, 1886-89; 1909-11.
Tuscola, Douglas County, 1909-11.

Little Wabash River drainage basin:

Albion, Edwards County, 1856-60; 1887-88; 1894-1911.
Eberle, Effingham County, 1886-88.
Effingham, Effingham County, 1892-1905.

TABLE NO. 3—*Concluded*

Ohio River drainage basin, continued:

Wabash River drainage, continued:

Little Wabash River drainage basin—*Concluded*

Fairfield, Wayne County, 1885-89; 1895-1911.
Flora, Clay County, 1869-1911.
New Haven, Gallatin County, 1891-93.
Olney, Richland County, 1878-82; 1886-1911.
West Salem, Edwards County, 1856-60.

Wabash River drainage basin, concluded:

Danville, Vermilion County, 1895-1904; 1910-11.
Friendgrove, Wabash County, 1895-1908.
Grayville, White County, 1879-83; 1897-1901.
Hoopeston, Vermilion County, 1887-88; 1901-11.
Melvin, Ford County, 1885-87.
Mount Carmel, Wabash County, 1876; 1884-1911.
Palestine, Crawford County, 1882-1911.
Paris, Edgar County, 1886-1911.
Rantoul, Champaign County, 1881-1911.
Urbana, Champaign County, 1857-59; 1872-82; 1902-11.

Ohio River drainage basin, concluded:

Blandville, Ballard County, (Ky.), 1871-1911.
Cairo, Alexander County, 1871-1911.
Equality, Gallatin County, 1895-1911.
Golconda, Pope Co., 1866-70; 1878-1911.
McLæansboro, Hamilton County, 1882-1911.
New Burnside, Johnson County, 1895-1911.
Paducah, McCracken County, (Ky.), 1882-1911.
Shawneetown, Gallatin County, 1886-87; 1892-93.

Lake Michigan drainage basin:

Chicago, Cook County, 1867-1911.
Chicago Heights, Cook County, 1901-1904.
Evanston, Cook County, 1858-76; 1885-91.
Fairmount, Cook County, 1892-93.
Fort Sheridan, Lake County, 1889-99.
Glenwood, Cook County, 1895-1900.
Lagrange, Cook County, 1892-1911.
Lake Forest, Lake County, 1886-90.
Morgan Park, Cook County, 1897-1902.
Rose Hill, Cook County, 1895-97.
Waukegan, Lake County, 1886-87.

TABLE NO. 4

Precipitation Records in Illinois from United States Weather Bureau.

ALBION, EDWARDS COUNTY, ILLINOIS

Elevation, 531 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
*1856	.....	2.30	0.65	1.05	2.93	1.87	6.93	4.86	0.86	1.07	3.64	2.95	.....
*1857	.....	4.52	1.13	1.70	4.37	6.83	3.24	5.75	1.37	1.19	5.29	3.24	.....
*1858	3.47	2.44	3.74	5.28	8.33	5.66	5.08	1.45	2.19	4.08	3.28	6.00	51.00
*1859	2.26	4.60	4.02	5.91	2.78	2.64	4.14	1.62	3.62	.93	4.17	4.33	41.02
*1860	.....	.....	.66	5.04	4.09	5.51	.....	.....	6.11	1.45	.....	.....	.....
1887	.50	4.41	5.60	5.42	2.08	3.78	3.96	†0.4	3.20	.79	3.55	3.60	37.94
1888	1.04	1.40	5.33	2.21	3.18	7.35	2.00	10.62	1.52	2.92	7.10	†4.01	48.68
1893	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.85	.....
1894	2.59	3.35	2.43	3.09	5.32	.46	2.12	3.75	2.14	2.35	T	4.07	31.67
1895	4.25	.15	1.45	2.09	1.87	4.67	6.21	2.20	2.95	.96	5.48	2.81	35.09
1896	.73	1.30	4.81	1.23	13.21	6.13	4.89	2.54	5.68	2.05	3.35	.46	46.38
1897	3.73	4.08	10.19	7.47	2.62	4.34	4.82	1.05	.74	.63	6.32	4.60	50.59
1898	6.00	1.91	12.39	5.27	6.68	3.35	5.51	3.42	3.57	3.25	2.27	1.47	55.09
1899	4.42	2.89	4.58	1.19	3.66	6.55	4.24	2.10	2.72	3.15	3.12	2.74	41.36
1900	1,80	4.24	2.30	1.55	5.20	7.81	4.19	1.36	4.91	2.28	3.85	1.79	41.28
1901	1.31	2.34	4.00	3.10	1.60	3.84	3.31	2.11	1.99	2.87	1.72	5.70	33.89
1902	2.00	.86	2.86	1.85	4.15	4.98	2.33	3.02	3.03	.93	4.92	4.99	35.92
1903	2.40	4.59	4.26	3.18	‡2.05	3.05	4.19	4.92	1.28	4.55	1.41	2.01	37.89
1904	4.47	2.71	12.06	2.82	3.06	3.57	1.80	2.23	5.86	.45	.60	3.28	42.91
1905	2.70	1.63	2.76	4.21	4.29	1.83	5.88	2.05	2.37	6.06	2.62	3.56	39.96
1906	5.44	2.44	5.35	1.61	2.00	1.99	2.00	3.92	4.85	2.14	5.45	4.45	41.64
1907	8.65	.71	4.74	3.51	4.12	4.81	3.92	6.98	.32	2.21	4.02	5.20	49.19
1908	2.56	6.55	4.99	5.38	7.60	.99	2.59	1.83	.71	T	3.59	1.15	37.94
1909	2.53	5.36	3.59	4.91	3.34	7.28	4.93	1.01	4.62	2.68	3.10	3.28	46.63
1910	2.55	3.84	.18	3.48	2.69	1.36	6.00	3.53	5.30	7.27	1.03	1.79	39.02
1911	1.33	2.09	1.52	5.56	1.14	3.90	1.03	1.92	4.08	2.16	2.92	2.30	29.95
Means	3.03	2.95	4.22	3.52	4.10	4.18	3.97	3.10	3.04	2.33	3.45	3.22	41.59

† Values for Fairfield, sixteen miles distant.
‡ Values for Mt. Carmel, sixteen miles distant.
* Values 1856 to 1860 for West Salem, ten miles distant.

ALEDO, MERCER COUNTY, ILLINOIS

Elevation, 738 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1874	.....	.....	.....	.....	.....	1.00	3.60	6.20	5.40	.....	.....	.....	.....
1875	.....	.....	.....	.....	0.50	4.20	10.20	2.20	1.75	1.35	.....	.....	.....
1876	.....	.....	.....	.....	7.10	3.50	7.50	3.00	4.50	.50	1.20	.....	.....
1877	.....	.....	.....	2.95	4.40	8.30	5.25	4.50	2.80	4.15	.....	.....	.....
1878	.....	.....	.....	2.20	4.90	5.15	1.75	7.10	2.15	2.80	.30	.....	.....
1879	.....	.....	.....	.75	2.25	3.90	5.06	2.65	2.44	1.33	3.82	.....	.....
1880	.....	.....	.....	4.67	4.10	5.68	5.16	4.38	3.40	.80	1.01	.....	.....
1881	.....	.....	.....	.....	1.80	11.42	2.24	1.65	4.55	8.14	2.09	.....	.....
1882	.....	.....	.....	4.78	9.04	8.18	3.99	2.69	1.12	3.48	1.28	.....	.....
1883	.....	.....	.....	2.25	6.61	6.21	2.94	1.18	1.07	5.73	3.03	.....	.....
1884	.....	.....	.....	.97	4.22	3.18	4.00	2.85	3.58	7.35	2.17	.....	.....
1885	.....	.....	.....	2.54	2.87	4.09	6.34	5.60	2.61	2.50	.98	.....	.....
1886	.....	.....	.....	.83	5.07	1.17	.11	2.05	3.34	3.21	1.06	.65	.....
1887	1.54	6.12	.80	.70	1.68	2.05	2.81	2.02	3.13	2.88	1.00	3.52	28.25
1888	.....	1.15	2.81	1.30	4.64	4.33	4.50	3.22	1.84	1.68	2.45	2.09	.....
1889	1.37	1.87	1.49	3.03	4.68	5.35	.....	.....	.....	.....	.....	.....	.....
1900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.35	.....
1901	1.44	1.88	2.72	1.28	1.93	2.28	2.16	.44	2.36	.97	1.06	.91	19.33
1902	.58	.82	2.57	3.39	5.36	7.81	8.79	6.89	5.11	3.51	2.10	1.96	48.89
1903	.73	1.53	1.86	3.60	6.26	3.84	1.89	6.53	6.35	5.09	.98	.66	39.32
1904	1.84	.37	2.78	1.95	3.33	2.03	4.49	7.58	3.62	.62	.15	1.75	30.51
1905	.58	1.52	2.06	3.72	3.24	4.52	2.46	2.14	1.70	2.33	2.05	1.29	27.61
1906	2.57	2.28	2.42	2.40	4.37	4.91	1.18	3.20	5.63	1.57	3.12	1.67	35.32
1907	4.10	.26	2.87	2.27	5.13	2.66	6.74	5.60	2.02	.62	1.40	.54	34.21
1908	.47	2.58	1.85	2.20	6.88	4.93	3.98	5.73	1.92	1.40	2.63	.72	35.29
1909	1.32	2.34	1.61	4.00	4.19	3.36	4.10	.44	3.04	2.23	4.79	3.66	35.08
1910	1.79	.98	.70	3.62	4.37	2.82	2.15	2.73	2.95	.87	.42	.95	24.35
1911	1.52	2.99	1.37	3.29	1.98	1.30	3.84	1.85	13.74	2.50	4.06	1.90	40.34
Means	1.53	1.90	1.99	2.55	4.27	4.38	4.22	3.63	3.50	2.70	1.88	1.51	33.21

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

ALEXANDER, MORGAN COUNTY, ILLINOIS

Elevation, 670 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1861	.....	.....	6.30	2.10	3.25	4.15	2.70	3.20	4.95	2.25	0.75	1.10	.....
1862	5.85	0.90	2.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1882	.....	.....	.....	.....	.....	.....	2.70	4.45	1.55	6.55	0.36	.....	.....
1886	.....	.....	2.56	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1887	.89	2.48	1.20	1.50	2.96	.....	.....	.....	.....	.30	1.76	3.03	.....
1888	2.82	1.82	2.24	1.04	5.54	4.21	6.30	1.53	2.05	2.15	2.00	2.64	34.34
1895	.....	.....	.....	.....	.....	2.43	6.55	1.99	3.82	0.28	2.78	6.82	.....
1896	1.19	1.69	.82	2.49	4.27	4.63	7.50	.89	5.49	1.98	1.09	.22	32.26
1897	6.05	.83	4.42	4.35	3.39	4.52	2.41	2.20	.24	.33	3.50	2.42	34.66
1898	4.21	2.81	5.25	3.15	5.83	5.14	2.28	3.17	5.19	3.80	2.56	1.19	44.58
1899	.96	2.19	2.05	1.18	9.15	1.91	1.84	3.92	4.29	3.07	2.31	1.48	34.35
1900	1.10	3.46	1.47	1.13	2.75	3.09	2.74	3.69	5.29	2.86	3.05	.24	30.97
1901	2.33	1.44	2.75	1.34	.70	2.23	1.44	2.84	1.54	2.00	.88	2.15	21.64
1902	.70	.97	3.50	3.26	2.19	7.01	3.27	5.38	4.01	2.29	3.08	2.45	37.66
1903	1.07	2.93	2.67	3.67	3.42	5.20	3.54	2.90	3.57	2.12	.78	1.09	32.96
1904	1.74	1.40	4.51	5.26	3.56	4.90	3.74	3.84	3.86	.27	.05	.68	33.81
1905	.67	.88	1.75	1.82	3.51	3.61	4.33	4.58	3.98	3.67	1.43	1.42	33.65
1906	1.72	2.47	2.98	2.22	4.20	2.98	.89	5.03	3.23	.95	3.02	2.84	32.53
1907	5.26	.26	4.23	2.53	2.38	2.94	8.57	7.78	1.09	1.55	1.25	2.58	40.42
1908	1.27	3.07	2.06	4.97	7.78	3.14	2.31	1.21	1.40	.22	1.81	1.29	30.55
1909	2.10	3.81	1.03	4.19	6.14	2.24	6.11	.66	3.89	3.57	4.54	1.50	39.78
1910	1.49	.84	.04	2.69	5.25	3.13	2.56	3.62	5.78	1.72	1.14	.80	29.06
1911	1.74	1.26	1.55	4.21	2.25	.47	1.91	3.58	12.22	2.03	2.47	1.84	35.53
Means	2.15	1.84	2.62	2.79	4.13	3.57	3.68	3.32	3.87	2.09	1.93	1.89	34.04

Values prior to 1895 are for Jacksonville, ten miles distant.

ALTON, MADISON COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1891	0.68	2.09	2.49	2.22	3.78	4.70	1.65	4.40	0.87	0.61	4.99	1.44	29.92
1892	2.09	4.38	2.09	6.38	7.87	3.57	5.35	1.65	2.50	1.40	3.05	2.17	42.50
1893	.26	3.34	5.86	8.47	5.84	3.27	1.48	1.50	.....	.....	.....	.....	.....
Means	1.01	3.27	3.48	5.69	5.83	3.85	2.83	2.52	1.68	1.00	4.02	1.80	36.21

ANDALUSIA, ROCK ISLAND COUNTY, ILLINOIS

Elevation, 686 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1858	.....	1.85	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1859	.....	.....	.....	.....	.....	.....	3.08	1.04	2.04	1.01	.....	.....	.....
1860	.....	1.70	0.12	1.55	2.32	3.81	3.24	.75	3.35	.69	6.80	.....	.....
1861	.....	.....	.....	9.07	6.01	.05	2.10	.....	5.60	1.90	.....	.....	.....
1871	.....	.....	.....	.....	.....	1.83	1.88	2.32	.21	1.23	1.36	1.86	.....
1872	.....	.22	2.32	2.56	4.42	6.81	2.02	7.71	4.16	.68	.88	.47	.....
1873	2.80	2.25	.25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	2.80	1.50	.90	4.39	4.25	3.12	2.46	2.96	3.07	1.10	3.01	1.16	.....

Values from 1858-61 inclusive are for Edgington four miles distant.

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

ANTIOH, LAKE COUNTY, ILLINOIS

Elevation, 681 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
*1900	.....	.....	.....	1.57	.....	.....	.....	11.03	1.86	.....	.....	.....	.....
1901	.....	.....	.....	.....	.....	.....	2.85	1.31	1.97	0.61	0.66	0.90	.....
1902	0.45	1.40	1.95	1.30	7.45	5.90	6.25	.55	7.35	3.67	1.80	.70	38.77
1903	.35	.60	2.60	2.55	3.65	2.90	6.60	7.95	6.35	.80	.70	1.10	36.15
1904	.55	1.10	5.20	2.20	1.90	1.39	4.41	2.20	4.55	1.20	.75	1.30	26.75
1905	1.00	2.05	2.65	.....	4.45	2.95	5.80	5.20	2.80	.....	1.70	1.55	.....
1906	3.20	2.40	.60	1.95	2.10	2.95	1.65	5.33	5.87	2.25	3.30	1.15	32.75
1907	3.80	.30	1.65	.95	5.29	4.80	2.02	3.96	5.43	1.05	1.87	2.10	33.22
1908	2.55	2.20	3.35	4.85	5.26	3.60	4.29	1.57	1.00	1.15	2.70	1.00	33.52
1909	2.20	1.60	.00	3.68	1.05	2.00	1.15	6.55	3.62	.61	3.23	3.50	34.79
1910	2.20	.65	.05	2.94	4.94	1.30	.83	3.61	2.80	2.37	2.00	.....	.....
1911	.80	2.88	.23	5.57	3.10	4.00	1.28	5.73	6.16	4.16	5.29	2.50	41.70
Means	1.71	1.52	2.03	3.44	3.92	3.18	3.38	4.58	4.15	1.79	2.18	1.58	34.71

* Values for 1900 for Lake Villa, four miles distant.

ASHTON, LEE COUNTY, ILLINOIS

Elevation, 830 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1895	.....	.....	0.65	0.42	3.15	3.72	3.74	3.56	1.22	0.77	2.33	2.99	.....
1896	0.57	1.62	1.33	3.71	5.74	3.55	4.71	2.04	6.49	.87	2.32	.37	33.32
1897	4.15	1.51	4.21	3.19	1.58	2.07	.99	.45	1.03	.32	2.21	1.30	24.01
1898	2.69	2.14	4.78	2.48	3.45	3.00	1.60	8.61	3.61	2.85	1.97	1.17	38.35
1899	.48	1.66	2.21	1.21	6.04	1.18	2.98	1.29	1.51	1.99	.63	1.94	23.12
1900	1.34	2.47	2.42	1.45	5.80	1.43	4.60	9.34	3.51	2.80	2.00	.40	37.56
1901	.91	1.16	3.12	.46	2.68	2.02	4.14	.44	2.13	.73	1.33	.99	20.11
1902	.73	1.36	1.76	1.51	6.72	10.41	7.26	2.51	4.09	4.18	2.38	1.69	44.60
1903	.94	1.32	3.14	4.62	2.91	1.69	6.29	4.95	6.98	3.40	.62	1.80	38.66
1904	2.18	2.09	4.03	3.10	2.92	1.32	4.35	4.51	3.98	.93	.02	2.71	32.14
1905	.50	2.34	3.46	3.95	5.39	2.73	2.02	4.25	.70	2.52	1.69	1.17	30.72
1906	2.40	2.72	3.32	1.18	6.59	7.45	2.38	2.82	4.72	2.28	2.79	2.00	41.28
1907	4.13	.61	2.12	1.95	5.10	4.90	6.98	5.31	.....	.....	.....	.....	.....
1908	.35	3.35	3.43	2.32	8.35	2.55	3.72	3.37	.78	1.01	2.05	.53	31.81
1909	2.16	2.14	1.49	7.15	2.73	4.47	1.02	3.75	1.96	1.45	.....	.....	.....
Means	1.68	1.89	2.76	2.62	4.61	3.56	3.78	3.76	3.05	1.86	1.72	1.47	32.97

ASTORIA, FULTON COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1864	.....	.....	.....	.....	.....	.....	.....	*0.59	.....	.....	.....	.....	.....
1898	.....	.....	.....	.....	.....	.....	.....	.....	6.68	2.22	2.47	0.97	.....
1899	0.89	1.99	2.75	1.14	8.38	2.58	4.25	3.00	4.26	3.43	1.96	2.02	36.65
1900	2.00	6.99	1.17	1.09	2.72	1.30	1.82	3.89	3.53	2.90	1.16	.34	28.91
1901	2.30	.97	3.07	1.40	.58	3.86	2.65	.70	2.63	.71	.82	2.68	22.37
1902	1.70	1.68	4.08	2.52	3.32	8.71	4.83	5.58	3.03	2.77	2.64	2.77	43.63
1903	1.36	3.13	2.81	5.36	4.44	3.50	4.03	4.43	4.60	3.15	1.27	2.30	40.38
1904	4.15	1.07	4.84	4.35	5.00	4.16	5.42	2.77	5.33	.38	.14	1.90	39.57
1905	1.61	2.78	1.95	3.53	2.75	2.83	2.51	4.34	3.82	2.63	2.10	1.71	32.86
1906	2.16	1.29	3.90	3.21	2.18	3.98	.71	3.50	5.60	1.37	2.20	1.76	31.86
1907	6.04	.36	2.59	3.10	2.75	3.51	7.38	6.33	2.03	.51	1.78	1.74	38.12
1908	1.03	5.00	1.48	5.09	8.06	3.14	2.97	1.46	1.18	.65	2.51	1.00	33.57
1909	2.10	3.81	1.98	5.98	5.15	6.51	4.73	2.18	4.03	2.74	4.19	2.46	45.86
1910	1.73	1.16	.40	2.86	6.33	2.82	2.65	1.16	4.51	1.92	1.67	1.16	28.37
1911	2.62	2.27	3.03	3.75	1.14	4.01	2.90	2.26	14.22	2.66	2.33	2.92	44.11
Means	2.38	2.50	2.62	3.34	4.06	3.92	3.60	3.20	4.67	2.00	1.95	1.84	35.87

* Value for Vermont six miles distant.

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

ATHENS, MENARD COUNTY, ILLINOIS

Elevation, 800 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1840	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37.46
1841	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38.51
1842	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35.76
1843	2.00	1.92	3.05	4.50	6.00	5.74	1.87	0.75	6.60	1.00	5.10	2.40	40.93
1844	2.80	1.30	3.40	5.90	7.55	17.13	4.50	2.80	0.32	1.00	.75	.72	48.17
1845	1.95	.46	2.20	6.50	2.55	13.68	2.62	1.62	4.14	2.48	3.35	1.48	43.04
1846	4.87	1.83	2.55	7.84	3.96	5.28	2.33	1.13	7.44	1.16	1.55	4.96	44.90
1847	2.27	3.47	1.51	2.09	3.12	1.07	2.01	2.64	3.76	4.62	4.80	1.25	32.61
1848	1.60	2.37	4.47	3.33	4.03	4.48	4.55	5.02	1.70	2.23	2.05	8.39	44.22
1849	5.54	1.04	4.71	4.96	3.51	2.91	2.31	3.43	5.06	2.46	1.37	1.19	38.49
1850	1.51	.80	1.52	5.03	3.60	6.22	4.50	6.40	4.68	2.06	2.58	1.79	40.69
1851	.52	4.38	1.05	4.70	6.71	10.16	3.45	6.86	2.79	0.98	2.38	2.93	46.91
1852	1.46	1.31	4.76	4.30	2.91	2.86	4.07	.39	2.00	6.79	4.10	3.31	38.26
1853	1.38	2.34	1.47	2.51	6.66	5.52	3.87	3.65	3.39	1.27	2.12	.65	34.83
1854	1.25	2.01	2.16	3.58	7.66	3.84	1.76	1.33	1.25	3.76	1.09	1.44	31.13
1855	9.37	.85	2.56	1.60	4.83	3.40	5.14	4.40	2.30	2.53	2.59	3.95	43.52
1856	.95	1.53	.45	1.48	3.07	1.16	1.51	2.12	1.84	1.56	4.36	5.06	25.12
1857	.44	7.66	2.76	1.86	2.60	3.87	1.55	2.98	2.38	1.76	3.18	1.50	32.54
1958	2.18	1.84	2.76	5.78	8.71	4.12	7.79	1.89	2.66	4.59	3.01	1.94	47.27
1859	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	32.81
1860	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	34.54
1861	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	36.04
1862	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	46.30
1863	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	34.36
1864	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	33.96
1865	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42.11
1866	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37.29
1867	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	29.53
1868	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38.93
1869	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	44.67
1870	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	29.90
1871	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	32.86
1872	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38.58
1873	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35.13
1874	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	33.75
1875	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	34.86
1876	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45.66
1877	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	39.09
Means	2.50	2.20	2.58	4.12	4.85	5.72	3.36	2.96	3.27	2.52	2.77	2.81	38.02

NOTE—The annual mean is for 1840-77, inclusive, the monthly means are for 1843-58, inclusive, monthly records 1859-77 all not available.

ATLANTA, LOGAN COUNTY, ILLINOIS

Elevation, 743 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1882	.....	.....	.....	.....	.....	11.44	2.42	7.69	1.50	4.71	.....	.....	.....
1883	1.47	5.50	0.93	5.38	5.59	5.60	3.97	1.11	2.19	3.63	2.82	2.50	40.69
1884	.75	2.85	2.80	1.74	5.25	5.22	4.22	2.50	.42	3.51	2.82	2.50	34.58
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1895	.....	.....	.....	1.58	1.05	4.12	6.71	3.39	6.33	.50	3.64	7.79	.....
1896	1.25	2.09	.93	2.39	4.60	.....	9.30	4.45	4.82	.23	2.32	.24	.....
1897	5.52	1.37	3.64	4.33	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	2.25	2.95	2.08	3.08	4.12	6.60	5.32	3.85	3.05	2.52	2.90	3.26	37.64

AUGUSTA, HANCOCK COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1856	.....	.....	0.25	3.13	8.61	1.10	5.99	1.53	1.26	4.52	4.97	6.06	.....
1857	0.39	4.80	2.56	.89	2.03	3.70	1.45	4.10	2.72	2.32	2.43	1.36	28.75
1858	2.05	1.52	3.17	7.22	9.51	5.86	7.93	2.33	2.46	3.01	3.11	2.88	51.05
1859	3.88	3.63	4.39	3.35	7.81	6.78	1.22	5.43	3.72	1.80	1.79	1.08	44.88
1860	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

AUGUSTA, HANCOCK COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1861	1.68	2.94	3.63	3.96	3.89	4.99	1.37	1.57	4.27	2.31	0.41	1.49	32.47
1862	4.63	.64	1.80	6.68	1.44	6.35	.....	.....	7.61	1.46	2.09	6.32	.....
1863	2.80	.....	2.21	.....	2.81	.27	2.62	2.46	3.43	3.08	.61	5.99	.....
1864	1.58	.58	2.26	6.76	2.16	1.42	5.26	1.29	4.16	2.90	3.88	3.55	35.80
1865	.15	2.81	4.02	5.77	.69	6.77	9.58	1.69	5.81	3.34	.12	1.25	42.00
1866	3.52	1.42	1.77	4.78	2.12	1.74	3.19	3.28	10.30	3.83	.51	2.88	39.34
1867	1.85	2.53	1.68	2.00	4.98	3.65	3.70	1.86	1.78	.99	1.33	1.30	27.65
1868	.92	.79	5.62	5.36	7.03	2.05	5.42	4.36	4.29	1.75	5.01	2.57	45.17
1869	2.16	2.56	.95	4.48	5.18	8.13	7.77	6.57	1.82	2.19	3.42	2.07	47.30
1870	2.11	.12	5.61	.63	1.73	2.35	2.01	5.41	5.78	5.19	1.39	1.40	33.73
1871	4.49	1.59	3.85	3.05	2.60	4.70	2.81	6.48	1.55	5.62	2.76	1.31	40.81
1872	.20	.85	3.06	2.93	3.33	4.96	6.27	2.72	2.56	.99	1.04	1.41	30.32
1873	3.93	1.24	.84	7.41	3.74	1.41	6.23	.46	5.32	3.85	1.57	7.63	43.63
1874	2.88	1.12	1.57	*2.50	2.00	6.61	3.42	4.95	2.18	.98	2.22	1.07	31.50
1875	.32	2.00	2.83	1.70	6.09	5.59	14.04	1.30	6.64	2.35	.52	3.89	47.43
1876	1.89	1.57	3.24	4.35	4.47	4.06	4.97	7.98	10.67	2.40	1.78	.20	47.58
1877	.82	.14	4.62	2.58	3.96	6.96	6.24	3.08	3.27	9.27	2.89	4.00	47.83
1878	1.14	3.31	5.16	3.28	4.91	2.89	3.85	6.06	1.13	2.85	1.17	3.82	39.57
1879	.73	.79	1.91	1.26	1.63	3.02	3.15	5.20	2.06	.19	3.97	1.51	25.42
1880	2.51	2.08	2.16	5.74	5.38	2.64	1.35	3.34	2.26	1.38	.....	.....	.....
1881	.....	5.34	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	2.03	1.94	2.88	3.90	4.09	4.08	4.78	3.54	4.04	2.86	2.13	2.83	39.16

* Estimated from surrounding stations.

AURORA, KANE COUNTY, ILLINOIS

Elevation, 687 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1857	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.40	2.57	1.00	.....
1858	2.19	1.34	2.38	5.19	6.83	5.07	5.69	3.84	5.01	3.91	3.64	2.41	47.50
1859	1.82	1.22	6.00	2.90	2.69	2.88	2.02	2.52	3.06	1.53	3.08	.75	30.47
1860	.....	1.62	.66	2.28	4.57	3.13	6.10	1.67	3.01	.....	.....	2.95	.....
1861	1.05	2.40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1865	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.57	.60	.....
1866	1.97	.77	2.01	.95	1.67	2.32	3.21	6.02	4.80	2.50	.94	3.06	30.24
1867	2.45	3.30	1.49	2.39	5.24	3.41	2.98	2.79	2.54	1.21	2.17	1.29	31.26
1868	.90	1.05	6.86	4.91	2.55	3.00	2.28	4.50	5.47	2.07	2.55	.....	.....
1869	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.63	.....
1870	5.48	2.45	1.92	1.58	1.35	1.63	5.50	3.31	3.63	4.63	1.51	1.37	34.36
1871	.....	1.80	3.04	2.33	4.48	4.75	1.75	1.97	.73	3.41	2.58	2.21	.....
1872	.35	.65	2.76	.....	.....	.....	.....	.....	6.20	.90	1.18	.70	.....
1873	5.34	.57	1.50	3.93	3.23	2.20	5.43	3.61	.....	2.50	1.30	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1879	.....	.....	.....	.....	.....	.....	.38	1.56	.76	2.40	4.17	1.70	.....
1880	4.08	3.55	2.25	4.36	6.10	3.91	5.63	7.46	3.22	2.14	1.03	.76	44.49
1881	1.17	8.06	3.88	1.68	2.61	5.80	3.19	.73	3.24	7.15	4.97	3.27	45.75
1882	1.14	2.95	2.83	5.98	5.04	*7.33	*3.89	4.70	1.30	3.21	2.10	2.47	43.03
1883	2.63	7.27	.61	3.75	7.23	3.56	4.44	.95	1.57	6.34	5.55	2.61	46.51
1884	1.24	3.74	2.30	2.66	2.26	2.18	6.38	2.48	2.42	4.61	1.90	4.59	36.76
1885	2.31	2.09	.38	3.31	3.16	5.07	2.59	7.72	4.04	3.74	2.04	3.05	39.50
1886	3.63	1.76	3.00	4.24	5.39	1.27	.36	2.97	5.60	1.80	1.26	1.18	32.46
1887	4.36	5.86	1.06	.82	3.02	.58	2.34	3.79	4.33	3.54	2.21	4.25	36.16
1888	1.40	1.56	3.19	2.08	5.16	.98	3.20	5.66	1.89	3.10	3.27	2.61	34.10
1889	2.06	1.32	1.47	2.63	3.82	4.38	5.08	*1.21	3.82	1.11	2.87	2.53	32.30
1890	3.24	1.18	2.64	2.17	4.25	6.97	.78	2.38	1.90	4.53	1.79	.78	32.61
1891	2.35	2.28	2.57	3.94	2.14	3.24	2.35	5.01	.66	.68	4.21	1.66	31.09
1892	1.53	1.18	2.28	3.59	8.29	12.83	4.48	2.74	2.36	1.28	1.63	2.26	44.45
1893	1.36	2.25	2.69	4.65	2.10	3.05	1.19	.32	2.70	3.20	2.99	2.60	29.10
1894	2.96	1.95	3.17	2.49	2.76	1.87	.62	1.79	7.07	1.68	1.93	.96	29.25
1895	1.53	.50	1.14	1.48	3.34	1.66	3.83	4.80	1.17	1.11	5.41	5.89	31.86
1896	.91	1.91	1.75	3.75	6.12	2.06	5.60	2.43	6.92	.22	3.83	.16	35.66
1897	6.02	1.73	3.58	3.04	1.06	5.25	4.45	2.23	.85	.21	3.89	1.32	33.63

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

AURORA, KANE COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1898	4.26	3.21	5.09	1.30	4.43	5.39	1.07	4.22	4.25	4.66	2.69	1.66	42.14
1899	.55	1.75	2.92	.49	7.34	1.59	4.82	1.84	2.23	2.13	1.05	1.61	28.32
1900	1.68	3.72	2.23	.78	4.17	2.94	3.55	3.28	1.99	2.83	3.23	.41	30.81
1901	1.39	1.73	4.11	.39	.71	1.81	4.79	1.06	2.34	1.27	1.21	1.40	22.21
1902	.47	2.05	3.14	2.16	6.18	13.19	7.43	2.32	7.29	2.02	2.93	1.71	50.89
1903	.83	1.94	3.94	4.23	3.11	4.09	5.59	5.39	7.45	2.69	.54	1.74	41.54
1904	2.12	1.47	5.02	4.21	2.51	1.96	3.81	5.62	5.05	1.53	.06	1.69	35.05
1905	.93	1.33	2.33	3.85	5.94	6.16	2.72	4.00	2.36	2.32	2.21	1.35	35.50
1906	3.10	2.52	2.12	1.57	3.10	1.67	2.12	3.80	8.31	2.25	2.64	2.48	35.68
1907	3.69	.26	3.17	2.00	4.90	3.70	5.51	6.72	6.08	1.43	1.62	1.07	40.15
1908	.81	3.86	3.58	3.10	7.19	1.43	4.50	5.35	.95	.67	2.02	.97	34.43
1909	1.43	2.57	1.34	8.38	2.64	4.71	.48	2.92	3.28	1.25	4.33	3.43	36.76
1910	2.35	.82	.36	3.96	6.20	.50	1.66	4.04	4.47	1.20	1.44	1.11	28.11
1911	1.13	1.70	1.13	2.23	2.31	4.64	2.06	5.84	7.23	3.64	2.78	1.76	36.46
Means	2.20	2.26	2.62	2.97	4.08	4.11	3.47	3.52	3.66	2.54	2.45	1.98	35.96

* Interpolated from surrounding stations.

BEARDSTOWN, CASS COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1885	.....	.....	.....	.....	.....	10.33	2.66	6.70	7.14	2.26	1.87	2.72	.....
1886	2.70	1.60	3.30	3.50	5.44	2.38	.50	4.10	5.16	1.04	1.56	1.03	33.87
1887	2.00	3.90	1.25	1.01	2.55	2.08	1.00	.45	3.35	.87	1.00	2.40	21.86
1888	2.80	2.25	3.30	1.15	4.55	7.49	4.22	2.88	1.30	.....	.....	.....	.....
1889	.....	.....	.....	4.20	7.05	7.57	5.32	2.70	3.61	4.63	1.73	.40	.....
1890	2.75	.90	1.45	2.60	2.80	3.84	3.57	2.00	1.10	1.38	1.63	.00	24.02
1891	.85	3.35	5.19	3.97	3.85	2.35	3.11	4.44	1.51	2.13	4.94	.87	36.56
1892	1.75	3.03	2.81	5.84	6.59	1.29	5.63	.41	2.47	.52	4.95	2.08	37.37
1893	.06	2.01	3.69	9.11	6.18	3.34	3.00	.41	1.49	.40	1.45	.62	31.76
1894	2.40	1.52	.85	2.26	2.58	2.88	1.77	1.45	6.08	2.39	1.52	1.43	27.13
1895	1.45	.08	.90	2.90	2.13	2.28	3.89	4.10	3.15	1.15	3.50	5.72	31.25
1896	1.65	1.90	.43	3.39	3.68	3.66	13.52	1.73	5.02	2.97	1.25	.88	40.08
1897	5.32	1.25	4.52	5.26	2.38	3.75	.....	.....	.....	.....	.....	.....	.....
1898	.....	.....	9.60	2.51	8.06	2.18	.....	.....	.....	.....	.....	.....	.....
1899	.....	.....	1.21	1.30	11.28	1.61	.....	.....	.....	.....	.....	.....	.....
1900	.....	.....	3.20	.79	4.44	1.71	.....	.....	.....	.....	.....	.....	.....
1901	.....	.....	3.72	1.87	.67	3.72	.....	.....	.....	.....	.....	.....	.....
1902	.....	.....	5.24	2.74	1.73	8.01	.....	.....	.....	.....	.....	.....	.....
1903	.....	.....	3.41	4.26	4.83	2.29	3.30	.....	.....	.....	.....	.....	.....
1904	.....	.....	.....	4.95	3.47	4.93	1.34	.....	.....	.....	.....	.....	.....
1905	.....	1.58	1.52	3.38	1.84	3.98	5.78	.....	.....	.....	.....	1.62	.....
1906	.....	1.42	2.78	2.50	2.20	3.40	1.08	.....	.....	.....	.....	.....	.....
1907	4.76	.24	3.56	2.60	2.92	2.38	5.06	5.54	.....	.....	.....	.....	.....
1908	.83	4.04	1.10	3.72	5.02	3.04	3.42	.....	.....	.....	.....	.....	.....
1908	.....	3.61	1.60	4.84	4.56	2.74	6.09	.....	.....	.....	.....	.....	.....
1910	.....	1.76	T	3.05	6.88	3.00	3.80	.....	.....	.....	.....	.....	.....
1911	.....	.....	.....	.....	.....	.....	.....	3.04	.....	.....	.....	2.09	.....
Means	2.26	2.03	2.94	3.45	4.31	3.70	3.90	2.85	3.45	1.79	2.31	1.82	31.54

BELOIT, ROCK COUNTY, WISCONSIN

Elevation, 750 feet

Year	Jan	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1866	1.00	0.70	0.90	4.15	0.55	2.51	3.53	8.89	1.53	1.51	2.15	1.60	29.02
1867	2.67	3.80	.70	.00	3.85	2.74	2.69	2.50	.....	.82	1.24	3.00	24.01
1868	1.06	.42	2.79	3.63	1.93	2.72	6.66	1.26	4.74	1.06	4.26	1.28	31.81
1869	2.54	1.13	.19	1.50	4.70	5.63	1.70	4.09	4.48	.40	1.70	2.35	30.41
1870	.86	1.12	3.36	.32	.....	.54	2.72	3.15	3.89	2.13	.88	1.20	20.17
1871	2.79	1.92	2.13	2.22	1.97	5.35	2.08	2.89	.15	2.01	2.83	1.22	26.56
1872	.45	.31	2.08	2.55	1.25	.00	1.87	3.57	6.32	.49	1.37	1.51	21.77
1873	2.98	.46	1.59	3.04	5.55	3.90	3.55	3.90	1.75	2.00	1.40	2.75	32.87
1874	4.50	1.37	1.73	.98	2.25	5.07	1.05	1.49	5.12	1.85	2.40	.70	28.51

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

BELOIT, ROCK COUNTY, WISCONSIN—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1875	1.39	2.38	1.87	3.15	3.05	5.55	5.20	3.70	7.10	2.10	0.00	1.95	37.44
1876	3.05	3.50	3.40	3.20	4.45	4.20	6.90	1.60	4.27	1.35	3.70	.85	40.47
1877	2.60	.00	5.60	3.80	1.55	4.73	.....	6.95	.65	.....	3.35	3.88	33.11
1878	.95	2.15	4.05	3.30	3.90	4.05	6.25	4.06	3.45	5.33	1.00	2.65	41.14
1879	.40	1.60	1.50	2.35	5.95	5.50	4.95	3.25	1.55	1.95	4.50	2.20	35.70
1880	2.40	1.88	1.70	3.70	2.70	4.60	3.80	6.90	6.82	.80	1.45	.29	37.02
1881	2.38	6.80	4.44	1.50	3.25	5.20	6.20	.84	4.94	5.95	2.45	2.69	46.64
1882	.90	2.51	4.10	3.38	3.55	6.51	3.42	3.49	2.30	3.21	2.44	2.21	38.02
1883	1.52	3.54	.54	1.47	6.42	4.52	5.50	2.36	1.35	4.25	2.68	1.53	35.68
1884	.64	1.68	1.52	2.85	2.83	5.15	1.27	2.94	2.22	3.96	1.71	4.24	31.01
1885	1.96	1.21	.21	3.75	1.54	5.37	2.99	9.27	4.56	3.20	.67	2.40	37.13
1886	4.02	1.28	4.60	3.53	2.55	2.96	1.19	5.04	1.78	2.60	1.15	1.22	31.92
1887	2.69	5.16	1.36	1.08	.99	.41	1.61	5.79	5.17	2.00	1.42	3.86	31.54
1888	1.16	1.12	2.83	2.76	5.60	3.84	4.55	3.34	1.01	1.38	2.08	2.32	31.99
1899	1.82	2.05	.48	3.85	5.27	3.61	3.73	.75	2.44	.24	1.46	2.27	27.97
1890	2.99	2.39	2.21	2.77	4.72	6.66	.28	3.98	.61	4.56	2.16	.55	33.88
1891	2.47	1.20	2.64	3.81	4.16	5.31	3.01	.85	.03	2.10	3.00	2.12	30.70
1892	3.22	1.49	2.10	4.66	7.65	8.61	3.75	5.87	2.57	.57	2.03	3.80	46.32
1893	2.18	2.10	2.81	5.32	2.11	4.34	3.74	1.41	2.38	3.00	1.96	1.18	32.53
1894	1.82	.98	2.94	3.49	3.16	2.61	1.23	1.12	9.03	1.82	2.60	.73	31.53
1895	1.83	.86	.35	1.31	2.30	2.10	2.90	3.31	1.58	.20	2.11	1.57	20.42
1896	.41	.85	1.49	2.25	5.02	3.15	5.77	2.64	7.59	.07	1.53	.49	31.86
1897	1.30	.47	2.05	4.72	.70	5.77	2.42	3.02	1.26	.65	1.05	1.25	24.66
1898	2.51	1.29	4.50	2.65	3.45	9.70	4.79	5.13	2.31	2.44	1.60	.23	40.60
1899	.22	.70	.28	2.65	6.15	2.53	4.02	2.49	3.20	1.50	2.26	2.03	28.03
1900	2.56	2.80	1.05	2.10	1.64	2.43	6.14	5.11	2.70	4.87	1.84	.73	33.97
1901	1.44	1.69	2.75	.45	2.43	1.54	2.13	.76	2.03	.88	1.17	1.59	18.86
1902	.65	1.30	1.49	1.71	7.39	6.57	9.04	.83	5.17	1.69	1.99	2.04	39.87
1903	.57	.66	2.74	3.05	3.53	.50	5.73	4.85	4.91	3.11	1.14	2.17	32.96
1904	1.83	.83	3.31	1.89	2.88	1.06	1.99	3.74	5.95	2.57	.10	2.51	28.66
1905	.94	1.37	2.79	1.35	4.21	.....	.....	.....	.....	3.20	1.98	1.48	.....
1906	2.73	1.08	1.47	1.42	2.64	3.49	2.33	5.54	3.19	2.36	2.06	.95	29.26
1907	2.77	.54	1.59	2.97	3.73	5.01	5.55	3.61	6.20	.88	.10	1.89	34.84
1908	1.19	2.10	3.58	4.46	6.33	4.27	4.40	.58	.91	1.26	2.70	1.30	33.08
1909	2.26	2.43	1.33	6.67	3.26	3.96	.87	8.51	3.09	.65	3.51	4.47	41.01
1910	1.97	.53	T	3.64	3.84	2.03	1.22	4.48	1.41	.93	2.00	.95	23.00
1911	.69	1.98	.17	4.40	2.71	3.95	1.40	7.71	6.70	2.32	4.13	1.14	37.30
Means	1.85	1.69	2.16	2.82	3.55	4.01	3.54	3.72	3.42	2.06	1.96	1.89	32.35

BELVIDERE, BOONE COUNTY, ILLINOIS

Elevation, 810 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1868	.....	2.69	.....	.....	.....	.....	.....	.....	7.16	0.65	3.36	1.40	.....
1869	2.11	2.68	1.76	3.22	4.30	9.68	5.39	4.96	2.59	.88	2.50	2.71	42.78
1870	1.72	.78	3.69	.69	1.10	.54	4.40	2.61	4.06	3.37	2.32	2.53	27.81
1871	3.34	.....	1.95	2.50	.....	.....	.....	2.42	.90	.....	1.82	2.03	.....
1872	.....	.23	3.26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1873	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1874	1.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1875	1.34	1.69	1.08	3.37	3.65	7.42	6.23	1.17	4.90	2.64	.64	2.68	36.81
1876	3.16	2.85	6.13	4.01	6.62	.....	.....	.....	.....	.....	.....	.....	.....
1877	.....	.20	5.86	.....	2.12	.....	.....	.....	.....	.....	.....	.....	.....
1878	.....	.....	.....	.....	.....	.....	.....	.....	.....	6.24	.82	1.61	.....
1879	2.13	1.36	1.56	2.12	3.78	5.17	7.01	2.70	.76	2.88	5.89	2.12	37.48
1880	3.63	1.24	2.08	3.16	4.66	6.51	6.21	4.44	6.92	2.19	1.83	1.76	44.63
1881	2.26	6.07	4.65	1.92	3.57	7.20	.....	.....	6.08	.....	.....	.....	.....
1882	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1883	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.83	.....	.....
1884	1.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1885	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.43	.....
1887	4.46	5.13	.92	1.11	2.88	1.94	4.14	6.01	4.65	2.28	1.80	3.68	38.90
1888	1.05	.72	2.67	2.31	5.39	1.90	6.20	1.95	.68	1.29	2.52	2.18	28.86
1889	1.36	1.45	1.55	2.64	5.00	2.34	2.39	.62	2.12	.50	1.95	1.88	23.80
1890	2.91	1.89	1.88	2.94	5.08	8.46	.33	3.22	.76	5.81	1.91	1.25	36.44
1891	2.28	1.61	2.49	3.73	2.64	.....	.....	.....	.....	.....	.....	.....	.....
Means	2.24	2.04	2.77	2.59	3.90	5.12	4.70	3.01	3.46	2.61	2.25	2.10	35.28

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

BEMENT, PIATT COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1887	1.53	4.56	1.36	2.20	.....	1.74	1.09	2.50	.....	.70	.....	.....	.....
1888	.....	.....	.....	.....	.....	.....	7.06	.....	1.36	4.84	.....	.....	.....
1889	2.18	2.10	4.34	.....	7.32	10.17	6.15	1.39	.....	.....	.....	.....	.....
1890	14.62	3.71	.....	.....	.....	.....	4.34	2.91	.....	2.56	.....	.....	.....
1891	.....	1.47	4.10	.....	1.46	.....	.....	.....	.....	.....	.....	.....	.....
1892	.....	.....	.....	8.97	.....	3.99	6.05	1.24	.....	.....	5.94	2.41	.....
1893	1.21	.....	4.47	11.82	8.05	.....	.74	T	.....	.....	3.98	.....	.....
1894	2.76	2.58	4.22	2.84	.....	1.68	1.94	.....	.....	.....	.....	.....	.....
1895	.93	1.45	.72	3.53	.....	3.72	4.25	.....	5.26	.24	5.04	7.43	.....
1896	1.53	3.17	2.84	1.78	6.16	5.72	12.14	3.32	6.57	1.71	2.93	.47	48.25
1897	6.92	2.79	6.37	8.08	3.56	8.17	7.65	1.69	.64	.24	5.83	4.22	56.16
1898	5.72	2.78	10.89	3.77	6.04	6.44	2.99	3.16	5.70	5.50	4.24	2.30	59.53
1899	1.60	3.27	2.59	.70	6.02	1.42	1.25	1.00	1.87	4.34	2.01	2.37	28.44
1900	.40	4.88	1.58	.38	5.11	3.82	4.93	5.37	2.84	2.50	4.04	1.01	36.86
1901	2.14	1.25	.....	.....	2.68	4.44	.20	1.99	1.80	2.47	1.30	1.05	.....
1902	1.83	1.44	.....	2.87	.....	.....	.....	.....	.....	1.35	.....	1.01	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1907	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.96	.....
1908	.92	4.00	2.75	4.74	7.97	2.81	3.74	.84	1.61	.23	2.38	1.71	33.70
1909	3.08	4.86	1.18	7.85	6.51	2.42	7.20	3.86	3.36	2.82	2.98	1.95	48.07
1910	1.54	1.55	.41	3.13	7.15	1.67	6.36	2.62	3.80	1.79	1.91	2.58	34.51
1911	2.35	1.88	2.23	5.59	1.40	1.71	.....	2.45	10.58	2.76	2.53	1.88	.....
Means	3.01	2.81	3.34	4.55	5.34	3.99	4.59	2.45	3.78	2.27	3.47	2.38	43.19

Values from 1887–98, inclusive are for Atwood, nine miles distant.
Values from 1899–1902, inclusive are for Monticello, six miles distant.

BENTON, FRANKLIN COUNTY, ILLINOIS

Elevation, 598 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1887	.....	.....	.....	3.17	1.25	1.40	1.94	1.00	1.77	0.67	3.10	3.25	.....
1888	0.90	1.52	4.08	1.05	1.75	2.76	1.45	7.42	1.70	1.40	3.40	2.40	29.83
1889	3.39	1.80	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1902	.60	.80	3.66	2.37	2.79	2.88	1.62	3.30	1.80	.96	4.89	5.55	31.22
1903	1.74	4.31	4.01	3.39	2.53	2.47	1.60	3.13	1.97	2.43	.96	1.92	30.48
1904	2.67	3.34	8.41	4.01	3.16	3.57	5.20	2.21	5.75	.26	.52	2.76	41.86
1905	1.03	1.15	2.27	1.65	.84	2.22	8.65	2.35	1.90	2.01	2.77	1.62	28.46
1906	4.85	2.70	*6.23	.70	1.60	2.95	.47	2.67	7.02	1.90	7.75	3.90	42.74
1907	7.05	.45	2.26	1.82	5.30	10.72	*3.77	7.47	1.00	2.30	4.78	3.71	50.63
1908	2.56	8.79	3.29	7.00	4.95	.72	3.00	2.05	1.00	.00	3.35	1.75	38.46
1909	3.90	5.77	5.65	6.54	4.00	1.60	12.45	.15	5.62	†.90	3.30	2.80	52.68
1910	1.30	3.12	T	4.04	4.17	1.90	3.15	.73	3.72	.....	.....	.....	.....
Means	2.73	3.07	4.43	3.25	2.94	3.02	3.94	2.95	3.02	1.28	3.48	2.97	38.48

* For Halfway fifteen miles distant.
† Estimated.

BLANDVILLE, BALLARD COUNTY, KENTUCKY

Elevation, 445 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1871	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.25	3.55	.....
1872	1.40	4.10	2.55	5.80	5.32	2.38	5.12	0.60	1.75	0.40	.00	1.30	30.72
1873	6.10	7.55	3.45	3.50	8.40	6.28	4.34	3.25	3.45	6.85	2.30	4.40	59.87
1874	3.05	7.20	8.77	6.10	.95	2.05	1.05	2.65	1.40	.90	6.90	.70	41.72
1875–81	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1882	4.50	10.62	6.51	6.10	12.58	6.20	5.03	5.28	4.25	2.25	7.17	2.90	73.39
1883	3.67	10.67	2.70	8.79	4.95	7.47	.00	2.15	.75	7.69	5.58	3.69	58.12
1884	2.10	6.99	5.38	4.72	4.50	4.54	6.82	2.73	3.12	2.79	.89	9.75	54.33
1885	3.90	1.51	1.40	1.14	3.71	4.91	1.98	2.96	4.96	3.54	2.05	3.42	35.48
1886	4.65	2.81	4.75	5.05	2.14	4.35	1.28	2.92	3.76	.42	6.32	2.47	40.92
1887	2.40	7.53	4.31	3.23	3.55	3.08	2.54	.93	3.33	.67	4.46	3.94	39.97

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

BLANDVILLE, BALLARD COUNTY, KENTUCKY—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1888	3.55	3.22	6.43	3.36	3.48	6.85	5.31	8.30	.44	3.58	5.56	2.04	52.12
1889	4.48	2.80	2.45	.96	3.37	6.94	6.23	2.11	4.18	4.04	7.28	1.10	45.94
1890	9.08	10.64	7.79	3.84	3.04	2.03	3.14	5.41	4.20	3.65	7.98	3.70	64.45
1891	5.42	3.83	8.11	2.10	3.24	5.94	1.22	5.87	.37	.25	8.76	5.55	50.66
1892	2.83	3.57	3.10	7.34	5.98	3.61	3.21	2.98	1.11	.91	4.74	5.95	45.33
1893	.22	5.13	2.68	7.02	7.03	4.13	2.38	.70	7.42	8.03	3.59	2.99	51.32
1894	3.69	6.43	4.38	3.44	3.91	.86	2.82	3.10	2.69	1.04	.76	3.48	36.60
1895	5.11	.58	3.15	3.00	1.44	7.09	5.61	.49	2.32	.84	4.75	3.00	37.38
1896	1.70	2.30	5.10	1.79	8.76	11.22	4.11	2.31	3.27	2.71	5.55	.88	49.70
1897	4.43	4.38	8.61	7.77	1.97	7.36	3.48	2.29	.08	1.38	6.65	3.61	52.01
1898	8.37	1.27	10.16	4.13	5.41	7.79	7.88	3.99	9.20	3.15	2.01	2.26	65.61
1899	8.13	3.57	5.86	3.77	5.63	2.28	6.54	1.47	3.29	3.36	3.27	4.77	51.94
1900	2.75	5.06	2.13	2.94	4.71	9.28	5.49	.48	3.21	4.04	5.91	2.67	48.09
1901	1.95	2.58	5.13	3.02	2.16	1.56	1.80	5.48	3.40	4.50	2.41	6.54	40.53
1902	4.80	2.00	3.54	3.98	2.29	4.80	.57	5.70	4.61	1.39	4.90	9.78	48.27
1903	2.85	7.78	4.10	2.35	4.43	1.72	3.76	.66	.65	2.25	2.12	4.68	37.35
1904	5.16	2.45	6.49	3.41	2.00	1.78	4.13	2.17	3.04	1.03	.29	3.98	35.98
1905	3.33	2.02	3.72	3.20	5.50	3.59	3.33	4.31	1.06	4.48	5.30	4.69	49.53
1906	7.84	1.61	6.82	1.48	1.48	4.20	4.60	3.28	6.04	1.64	3.61	7.22	54.82
1907	11.13	4.44	3.65	4.63	3.98	4.16	6.26	2.64	1.59	3.98	5.47	3.57	60.50
1908	3.72	3.32	2.89	7.73	5.04	6.51	1.76	3.25	.41	.03	4.36	1.74	45.76
1909	2.87	9.75	5.44	7.00	5.81	2.31	7.26	.02	5.79	2.72	3.74	4.35	57.06
1910	3.74	4.16	2.40	8.06	3.26	3.53	8.20	4.05	1.44	11.15	1.43	4.02	55.44
1911	1.65	3.59	.88	5.77	.62	2.75	3.11	3.85	3.39	.78	4.73	4.33	35.45
Means	4.26	4.36	4.69	4.44	4.46	4.65	4.10	3.28	3.33	3.22	4.35	3.91	48.69

BLOOMINGTON, M'LEAN COUNTY, ILLINOIS

Elevation, 840 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
*1882	.....	.....	.....	.....	.....	9.36	1.69	2.57	1.25	5.87	2.55	.....	.....
*1883	1.47	.....	1.43	7.67	.....	.....	.....	.....	.....	.....	.....	.....	.....
1885	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.34	3.13	.....
1886	2.00	1.46	1.81	1.87	2.49	3.71	.....	1.85	4.35	.78	.....	.....	.....
1887	.....	.22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1892	†.70	2.31	1.48	6.41	8.27	6.86	4.68	1.16	2.70	1.26	2.62	1.21	.....
1893	1.36	3.13	3.11	8.34	5.40	.80	1.16	.15	2.70	.74	1.93	1.47	30.29
1894	2.32	1.93	3.37	2.53	3.21	1.89	1.34	.91	5.59	‡.50	2.52	1.86	27.97
1895	1.26	.39	1.68	2.55	1.13	1.75	6.71	5.12	4.28	.61	3.74	7.62	36.84
1896	.82	2.55	2.11	2.02	6.79	3.90	6.68	4.75	5.40	.16	2.95	.53	38.66
1897	5.41	1.77	4.09	3.92	1.90	3.49	3.91	1.50	2.08	.48	5.00	2.00	35.55
1898	4.00	1.77	5.65	2.66	9.42	4.02	4.40	1.85	6.49	4.31	2.28	1.92	48.77
1899	1.52	2.20	4.72	.82	4.06	4.05	1.92	2.15	1.98	2.69	1.67	2.15	31.53
1900	1.23	5.94	2.60	1.85	5.40	2.49	3.38	3.38	1.55	2.62	3.96	.65	35.05
1901	1.70	1.84	4.04	.94	2.09	4.79	1.96	1.07	1.87	2.14	1.11	3.06	26.63
1902	.90	1.75	4.45	2.43	2.07	12.45	7.97	5.81	4.91	2.70	2.75	2.24	50.43
1903	1.31	3.32	3.24	5.76	4.01	3.25	4.63	2.04	2.75	1.48	1.47	2.49	35.75
1904	3.71	1.35	5.28	4.45	3.20	1.40	3.89	2.95	5.65	.52	.19	1.53	34.12
1905	1.37	1.82	2.18	5.11	5.56	3.44	4.06	2.96	3.59	2.89	2.65	1.89	37.52
1906	2.66	1.57	2.39	2.83	2.88	3.96	1.27	4.30	4.30	1.85	3.80	3.68	35.49
1907	5.18	.07	4.50	3.54	2.85	5.74	6.25	6.25	2.69	1.33	2.17	3.10	43.67
1908	1.20	3.80	3.12	7.78	10.17	1.53	2.10	1.17	.45	.50	2.48	1.47	35.77
1909	1.77	5.09	1.78	5.94	3.79	4.63	3.15	2.51	2.35	2.98	4.28	2.01	40.28
1910	1.84	1.03	.61	3.84	5.31	1.70	2.91	.70	5.39	1.23	.64	1.29	26.49
1911	1.67	1.51	2.84	2.71	1.73	1.66	2.80	2.46	10.25	2.58	3.71	2.66	36.08
Means	2.05	2.09	2.93	3.83	4.49	3.94	2.57	3.66	3.79	1.79	2.58	2.29	36.17

* Values for Normal, five miles distant.
† Value for Ellsworth, fifteen miles distant.
‡ Estimated from surrounding stations.

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

BLUFFDALE, GREENE COUNTY, ILLINOIS

Elevation, 593 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1886	1.91	1.24	1.78	3.40	2.28	3.65	.....	2.41	7.04	5.59	1.56	1.62	.....
1887	.49	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	1.20	1.24	1.78	3.40	2.28	3.65	.....	2.41	7.04	5.59	1.56	1.62	.....

BRUSH HILL, TAZEWELL COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1888	.....	1.38	.....	1.61	8.86	3.43	7.33	1.90	2.27	2.30	2.96	2.93	.....
1889	2.28	2.19	1.17	2.99	4.12	9.32	4.76	1.17	2.97	.....	.....	.....	.....
Means	2.28	1.78	1.17	2.25	6.49	6.38	6.04	1.04	2.62	2.30	2.96	2.93	.....

BUSHNELL, M'DONOUGH COUNTY, ILLINOIS

Elevation, 662 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1881	1.50	5.25	7.50	3.40	2.10	6.50	2.90	2.20	2.40	5.60	3.70	3.50	46.55
1882	1.50	3.10	6.60	5.30	7.90	16.50	3.40	3.00	.....	.....	.....	.....	.....
1892	.....	.....	.....	.....	.....	.....	.....	.....	2.11	1.19	2.55	1.63	.....
1893	.68	1.47	2.11	6.80	4.36	2.15	2.59	4.89	3.17	T	1.92	1.34	31.48
1894	1.05	1.40	2.28	2.46	2.23	4.69	.66	.92	6.86	1.37	2.12	1.15	27.19
1895	1.62	.26	.69	3.54	2.72	1.94	6.28	3.33	6.50	.71	3.20	1.18	31.97
1896	1.00	1.40	.43	3.45	4.44	2.58	8.34	3.34	6.96	1.65	1.67	.22	35.48
1897	5.20	.69	4.43	3.90	1.11	2.82	4.68	.53	1.16	.21	2.77	1.69	29.19
1898	3.58	1.64	5.90	.....	.....	.....	.....	.....	6.23	2.67	2.37	.55	.....
1899	.66	2.07	2.92	3.69	7.68	3.94	2.44	4.33	3.83	2.61	1.40	1.20	36.77
1900	2.20	1.29	1.50	1.94	4.12	1.53	2.70	4.04	5.15	2.90	1.40	.07	28.84
1901	.87	1.10	2.85	.13	.70	3.11	4.24	1.20	2.60	.70	1.60	1.50	20.60
1902	.....	.....	.....	.....	1.70	6.90	4.50	*7.88	*3.06	*2.42	*1.71	*2.39	.....
1903	*.88	*1.48	*2.42	*3.87	3.26	1.43	1.70	5.20	4.80	2.43	1.37	*.87	29.71
1904	3.45	.40	4.02	3.04	2.35	3.70	7.27	3.63	2.89	.44	.00	1.05	32.24
1905	.85	1.60	2.28	4.12	3.99	†7.03	3.03	1.85	5.99	3.89	2.25	1.31	38.19
1906	2.44	2.00	4.66	2.95	2.23	2.03	1.08	1.32	5.72	1.36	1.80	2.30	29.89
1907	3.83	.....	4.20	3.17	2.62	3.23	7.16	5.62	1.34	.45	1.17	1.51	34.30
1908	.26	2.54	1.88	1.86	8.05	3.57	3.61	1.38	.96	.75	3.01	.13	28.00
1909	2.12	1.95	1.38	5.43	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	1.87	1.65	3.23	3.29	3.62	4.33	3.92	3.22	3.99	1.79	2.00	1.31	32.02

NOTE—Values from 1881-82 are for Prairie City, five miles distant.
* Values for Fandon, eighteen miles distant.
† Values for Colchester. eighteen miles distant.

CAIRO, ALEXANDER COUNTY, ILLINOIS

Elevation, 359 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1871	.....	.....	.....	.....	.....	.....	5.97	2.22	2.34	3.81	2.93	4.25	.....
1872	1.44	2.26	2.02	4.52	5.00	1.79	3.45	.19	2.56	1.16	.57	1.56	26.52
1873	5.03	6.68	3.27	5.54	5.07	4.45	1.68	2.48	4.09	5.28	3.04	4.25	50.86
1874	3.11	7.38	6.68	7.57	1.55	2.20	.52	2.79	3.14	1.54	7.34	3.81	47.63
1875	3.21	2.17	6.73	3.01	3.11	8.41	9.88	3.32	.16	1.76	7.96	3.21	52.93

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

CAIRO, ALEXANDER COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1876	15.05	2.34	9.84	2.67	5.84	6.62	3.44	5.24	.73	2.14	.96	.73	55.60
1877	1.93	.25	3.62	3.87	2.13	4.88	5.63	1.58	3.15	3.12	4.76	4.55	39.47
1878	3.05	1.94	2.97	5.61	4.41	4.61	2.81	3.45	2.99	2.59	3.80	3.53	41.76
1879	2.81	2.03	2.95	3.03	2.79	8.70	1.37	7.05	.93	3.87	3.25	6.63	45.41
1880	4.56	5.01	4.52	3.25	4.64	2.92	4.34	2.61	4.55	6.96	3.98	2.22	49.56
1881	3.56	4.97	1.33	3.62	2.44	1.81	.18	.11	2.74	2.74	4.98	3.70	32.13
1882	6.35	10.14	4.22	4.14	10.22	3.34	5.25	3.46	3.28	2.57	5.96	2.65	61.58
1883	2.74	8.52	2.14	5.64	3.85	6.11	7.95	1.73	.34	6.97	4.36	2.18	52.53
1884	2.32	5.58	4.20	3.65	4.57	2.95	7.34	2.74	5.02	1.89	2.41	8.99	51.66
1885	3.49	1.48	1.08	1.43	3.21	4.63	.82	2.40	4.76	2.89	2.79	3.01	31.99
1886	3.82	2.54	2.84	6.64	2.98	4.87	1.01	2.84	2.52	.45	5.73	1.74	37.98
1887	2.15	4.60	2.18	2.09	1.37	2.34	1.42	1.10	1.67	.38	3.33	4.12	26.75
1888	2.80	2.51	4.91	3.08	3.58	5.48	3.32	5.45	.28	3.24	4.85	2.40	41.90
1889	4.61	1.57	1.40	.97	1.91	8.07	5.15	1.10	3.82	2.81	5.56	.77	37.74
1890	6.32	7.57	6.14	3.76	4.19	1.45	1.62	5.16	2.29	3.04	6.08	2.91	50.53
1891	3.95	3.20	5.86	1.55	2.48	3.97	2.21	4.77	.29	.49	7.30	3.49	39.56
1892	2.01	3.32	2.29	5.28	5.55	3.55	1.73	5.23	.90	.74	4.20	3.91	38.71
1893	1.26	3.93	2.09	6.91	6.70	7.59	1.23	1.64	6.83	6.26	2.75	1.60	48.79
1894	2.18	4.77	4.14	2.54	2.79	1.04	1.92	1.68	2.69	1.47	1.42	3.87	30.51
1895	3.77	.39	2.76	2.75	1.48	4.86	5.97	.71	1.86	.50	5.27	3.25	33.57
1896	1.45	1.69	3.97	2.57	10.82	4.73	2.31	1.78	2.95	1.73	4.18	1.18	39.36
1897	3.89	3.95	7.50	6.49	1.12	6.87	2.76	.89	.53	.91	5.50	3.69	44.10
1898	6.26	1.18	9.20	2.13	5.36	1.73	5.67	3.56	6.11	4.64	1.55	1.27	48.66
1899	5.46	2.51	3.59	2.33	5.27	5.74	3.90	1.06	2.25	3.42	3.05	3.84	42.42
1900	2.00	3.20	1.29	1.79	3.98	10.07	3.13	.27	2.40	1.70	4.63	2.43	36.89
1901	1.52	1.78	3.62	2.70	2.00	.91	4.57	3.83	1.56	3.40	1.77	4.02	31.66
1902	3.42	1.37	2.12	3.36	2.13	2.47	.40	3.26	3.29	.79	3.51	6.95	33.07
1903	2.35	4.19	4.28	1.85	3.52	2.37	4.89	.81	.75	1.98	2.07	3.85	32.91
1904	4.05	1.70	4.60	2.98	2.03	3.61	4.20	2.59	1.91	1.20	.15	2.98	32.00
1905	3.41	1.98	2.84	2.19	4.11	6.00	4.43	3.79	.69	3.00	3.64	3.40	39.48
1906	6.17	1.42	6.07	1.29	.46	2.33	3.86	5.73	4.77	.44	7.88	6.50	46.92
1907	7.77	3.58	3.39	3.81	6.78	2.95	3.92	2.43	1.14	2.90	4.43	2.48	45.58
1908	2.84	6.98	1.88	6.63	4.90	3.15	1.92	4.28	1.01	.02	3.32	1.54	38.47
1909	2.54	6.76	7.10	4.85	3.96	1.88	3.13	.01	5.66	.74	2.58	3.84	43.05
1910	2.63	3.29	1.39	6.78	2.86	2.05	7.59	2.90	.93	11.57	.55	3.39	45.93
1911	1.56	2.66	.77	5.77	.22	2.08	1.99	2.82	5.15	1.06	3.30	2.71	30.11
Means	3.72	3.58	3.85	3.76	3.78	4.14	3.54	2.71	2.56	2.63	3.85	3.35	41.41

CAMBRIDGE, HENRY COUNTY, ILLINOIS

Elevation, 824 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1873	.....	.....	0.70	1.65	4.00	1.80	1.95	2.60	1.40	0.80	0.80	5.00	.....
1874	4.70	1.00	1.50	1.80	.60	3.20	2.60	3.30	7.00	1.20	2.60	.10	29.60
1875	1.20	5.00	1.00	2.80	1.90	4.20	7.60	1.15	5.30	2.10	.60	2.60	34.45
1876	3.60	2.30	3.70	3.70	4.40	3.01	3.50	1.50	4.60	1.30	3.00	1.00	35.61
1877	2.20	.....	4.70	3.90	3.20	7.20	3.50	3.00	1.60	7.00	3.50	2.60	.....
1878	.30	2.00	3.50	4.20	5.10	3.10	2.80	5.90	1.50	3.10	.90	3.30	35.70
1879	1.00	2.00	4.00	1.90	2.10	3.70	4.60	3.20	1.80	1.80	2.60	2.20	30.90
1880	3.30	.80	3.10	3.10	7.00	†6.00	†1.50	6.20	4.70	.80	1.50	.50	38.50
1881	3.00	5.00	3.90	2.50	.50	7.81	1.50	.10	5.60	7.90	.50	1.30	39.60
1882	1.50	2.40	5.00	3.50	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1885	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.20	1.20	2.15	.....
1886	2.81	1.98	3.17	2.17	3.98	.54	.40	.83	2.99	2.36	.76	.84	22.83
1887	2.71	4.77	.70	.86	1.80	1.39	1.95	5.74	2.95	2.97	1.24	3.17	30.25
1888	.95	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1895	1.55	.30	1.60	1.23	2.42	1.40	7.40	2.78	2.99	.75	2.74	3.65	28.81
1896	.92	1.10	1.24	4.55	4.33	2.89	6.20	3.54	5.45	1.46	1.21	.63	33.52
1897	4.90	1.52	4.03	3.70	1.48	1.44	2.41	1.16	2.27	.33	1.89	1.61	26.74
1898	3.34	1.77	6.15	2.89	9.30	9.88	1.17	6.57	2.72	4.06	1.91	.60	50.36
1899	.29	1.63	2.81	2.21	6.15	2.86	2.91	1.78	2.22	3.89	1.22	2.44	30.41
1900	1.65	3.04	3.40	1.74	4.41	.93	2.70	8.19	3.24	2.72	2.16	.05	34.23
1901	1.37	1.90	3.11	1.37	2.06	2.61	3.90	1.38	2.17	.88	1.50	1.16	23.41
1902	.62	1.36	2.90	2.48	4.38	7.89	11.55	4.64	5.99	4.19	2.11	2.05	50.16

TABLE No. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

CAMBRIDGE, HENRY COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1903	.99	1.54	2.24	4.97	7.02	2.65	2.95	2.96	6.27	2.32	1.69	1.36	37.95
1904	2.09	1.69	3.65	1.94	2.40	1.55	10.29	5.60	5.53	.27	.21	2.14	37.99
1905	.57	2.40	1.69	3.52	3.25	5.21	2.11	4.02	1.57	1.95	2.27	1.25	30.85
1906	2.11	2.13	2.65	2.07	2.16	5.09	1.57	1.91	4.25	1.47	2.53	1.88	33.73
1907	3.09	.09	2.15	2.04	4.15	2.55	6.47	6.60	4.05	.56	1.23	.80	34.91
1908	.79	3.11	2.56	.....	.....	.....	4.24	2.69	1.13	1.12	3.29	.61	.....
1909	.....	.....	1.26	4.46	4.16	2.73	2.43	1.28	.....	.....	.....	.....	.....
Means	2.06	2.12	2.87	2.75	3.74	3.70†	3.91	3.48	3.46	2.25	1.75	1.73	34.11

† Estimated.
NOTE—All values prior to 1906 are for Geneseo, ten miles distant.

CAMDEN, SCHUYLER COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1896	.....	.....	2.68	.....	6.12	4.20	0.25	5.05	.....	2.05	1.76	0.94	.....
1897	1.30	.....	.36	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	1.30	.....	1.52	.....	6.12	4.20	0.25	5.05	.....	2.05	1.76	0.94	.....

CANTON, FULTON COUNTY, ILLINOIS

Elevation, 600 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1880	.....	.....	.....	.....	.....	.....	.....	11.02	2.46	1.76	2.16	0.78	.....
1881	0.66	4.53	5.88	1.95	0.93	9.67	3.90	1.57	2.96	7.10	3.64	3.23	46.02
1882	1.24	1.93	3.57	3.41	10.92	9.10	4.75	4.63	1.39	3.96	2.82	2.50	50.22
Means	0.95	3.23	4.72	2.68	5.92	9.38	4.32	5.74	2.27	4.27	2.87	2.17	48.12

CARBONDALE, JACKSON COUNTY, ILLINOIS

Elevation, 488 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1875	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.98	.....
1876	9.82	1.93	6.86	3.58	3.59	8.61	1.61	6.47	2.42	1.34	1.51	.45	48.19
1877	1.70	.35	1.85	4.62	3.33	7.01	.44	3.05	2.56	.....	.....	.....	.....
1910	.....	3.47	0.09	3.70	2.81	8.58	8.58	2.11	5.60	10.27	.25	2.24	.....
1911	.55	2.79	1.85	10.59	1.47	2.24	2.60	8.01	5.70	3.69	3.34	2.50	45.33
Means	4.04	2.14	2.66	5.62	2.80	6.61	5.81	4.91	4.07	5.10	1.70	1.54	46.76

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

CARLINVILLE, MACOUPIN COUNTY, ILLINOIS

Elevation, 663 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
†1856	1.50	.....	.....	.....	.....	6.56	2.64	5.80	8.50	3.51	1.78	0.80	.....
†1857	1.23	2.40	1.70	1.40	1.40	2.40	1.00	1.50	.70	.40	2.30	1.30	17.73
†1858	1.80	1.80	1.90	2.10	3.20	3.26	5.35	.36	1.81	3.80	3.52	2.37	31.27
†1859	1.97	3.54	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1878	.....	.....	.....	.....	.....	1.90	.95	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1881	.....	.....	.....	.....	.....	5.62	1.91	.....	.....	.....	.....	.....	.....
1882	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*1883	1.17	7.42	1.47	4.33	3.80	5.00	5.26	1.37	.10	6.30	4.07	2.46	42.75
*1884	2.47	4.11	3.79	2.33	4.27	3.96	2.30	2.56	7.19	2.33	1.86	5.80	42.97
*1885	5.19	.87	.42	4.27	1.98	8.22	2.29	3.96	5.73	4.89	1.35	3.06	42.23
*1886	6.10	1.39	2.86	.....	6.30	7.58	.16	2.94	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1891	‡.70	1.93	2.39	2.08	2.56	3.48	1.27	5.34	.62	.94	5.25	1.08	27.64
1892	1.52	3.77	2.42	9.34	9.90	5.72	4.13	1.91	2.23	1.78	4.42	1.69	48.83
1893	.37	5.72	3.68	9.23	4.59	4.10	1.84	.51	2.57	1.69	1.37	1.45	37.12
1894	3.09	2.77	3.15	3.12	2.33	1.42	1.77	1.20	5.28	1.07	3.46	1.90	30.51
1895	1.08	1.02	1.60	2.08	1.42	3.16	5.58	2.14	3.43	.42	2.91	6.75	31.59
1896	1.28	2.76	1.51	2.48	8.11	6.60	6.53	4.63	3.87	1.35	2.01	.43	41.56
1897	3.91	1.62	6.72	5.85	2.66	3.91	3.33	1.65	T	.21	5.06	2.89	37.81
1898	4.98	1.96	7.49	4.30	7.58	3.66	3.68	2.68	5.39	4.60	2.63	2.16	51.11
1899	1.79	2.30	3.24	1.27	7.01	1.71	2.54	6.48	2.29	3.91	2.30	2.38	37.22
1900	.61	4.70	1.72	1.36	4.85	4.88	5.99	1.42	5.03	2.42	2.43	.95	36.36
1901	1.70	1.81	4.15	2.56	.86	3.65	.72	1.83	.83	2.63	1.49	4.54	26.77
1902	1.14	.86	4.18	2.44	3.37	10.82	1.82	5.43	3.76	3.06	3.23	3.39	43.50
1903	1.57	3.76	2.18	5.62	3.17	3.75	3.89	3.38	3.69	1.50	.54	1.75	34.80
1904	2.64	1.09	8.60	6.88	2.93	3.86	9.51	3.57	4.11	.43	.08	1.02	44.72
1905	2.39	1.17	2.04	3.68	4.26	1.20	7.44	4.65	3.88	5.14	1.68	2.18	39.71
1906	3.12	3.06	4.20	2.60	2.33	2.17	7.73	5.86	4.96	1.97	3.94	2.57	44.51
1907	5.57	.57	2.67	3.21	4.36	5.01	5.59	3.77	.63	1.52	1.78	2.45	37.13
1908	1.56	4.81	2.41	5.11	9.08	3.42	2.36	1.35	2.28	.23	3.37	1.70	37.68
1909	2.58	4.04	1.87	6.02	4.75	4.65	5.41	.47	4.76	3.15	3.76	1.99	43.45
1910	1.92	2.20	.15	4.89	6.52	3.73	5.89	1.37	7.48	2.57	.44	1.66	38.82
1911	1.80	2.14	1.75	4.93	2.49	.90	2.30	5.76	5.98	3.49	2.18	2.17	35.89
Means	2.30	2.70	2.97	3.98	4.30	4.21	3.71	2.99	3.60	2.42	2.57	2.36	37.83

† Data for 1856–59, inclusive are from Brighton, twenty-one miles distant.
* Data for 1883–86, inclusive, are from Bunker Hill, seventeen miles distant.
‡ Interpolated from surrounding stations.

CARLYLE, CLINTON COUNTY, ILLINOIS

Elevation, 450 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1885	.....	.....	.....	3.50	3.72	5.29	0.62	4.06	6.77	4.39	2.97	3.49	.....
1886	3.12	1.40	2.42	2.09	2.35	8.10	1.34	3.78	5.48	.72	3.91	2.67	37.38
1887	1.31	4.46	4.51	3.47	4.03	2.75	2.02	.38	3.10	1.12	7.45	4.04	38.64
1888	2.54	2.77	3.46	1.77	3.95	7.59	3.61	7.18	.87	2.47	3.58	2.78	42.57
1889	2.76	1.76	1.81	*9.50	4.93	6.41	4.86	1.09	3.43	1.83	5.32	1.48	37.18
1890	8.41	3.86	4.56	5.40	3.65	3.08	.58	1.22	3.44	.60	2.39	.77	37.96
1891	1.45	2.75	2.57	2.62	3.18	5.30	.73	2.37	.87	1.69	6.05	1.05	31.63
1892	2.44	3.03	1.24	8.33	6.81	4.60	4.21	†2.64	1.09	1.28	4.23	1.36	41.26
1893	†.84	†3.72	2.73	10.94	4.16	5.62	3.49	.89	4.35	.51	2.02	1.28	40.55
1894	2.17	2.17	2.68	2.20	3.47	1.44	2.06	.84	4.97	1.44	.68	2.92	27.04
1895	2.30	1.06	1.97	2.06	3.85	1.90	10.42	4.19	2.46	.55	3.64	4.53	38.93
1896	2.39	2.62	2.46	1.57	6.67	3.36	6.92	3.55	6.86	1.93	5.31	.39	44.03
1897	4.04	2.75	10.24	4.45	2.77	3.50	4.23	.21	.09	.64	5.43	2.75	41.10
1898	3.98	1.76	11.93	3.91	9.55	6.48	6.23	4.66	2.87	4.21	2.44	1.80	59.82
1899	2.79	3.21	2.68	1.80	4.18	2.38	3.09	3.33	.46	3.70	1.72	2.82	32.16
1900	.56	2.87	1.95	1.32	6.25	8.70	*.77	1.25	5.64	2.83	3.35	1.70	37.19
1901	.72	1.81	3.85	2.78	2.38	3.47	.27	2.65	1.09	2.80	2.24	4.21	27.27
1902	1.07	1.02	5.23	2.50	2.47	7.75	3.00	6.44	2.51	1.36	2.86	3.96	40.17

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

CARLYLE, CLINTON COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1903	1.58	3.31	3.01	3.64	3.39	2.13	.95	3.23	1.95	2.97	.85	2.12	30.13
1904	3.10	.71	8.69	4.48	2.41	2.73	6.92	4.53	5.95	.83	.38	1.20	41.93
1905	2.35	1.53	2.60	6.99	4.44	5.81	11.21	2.93	5.94	5.79	2.09	2.45	54.13
1906	3.08	1.78	4.72	1.71	1.64	2.05	.47	2.65	5.26	.84	4.90	2.13	31.23
1907	6.51	.94	3.56	3.95	3.81	8.27	4.36	4.65	.89	2.86	2.41	3.70	45.91
1908	1.90	4.51	3.48	5.05	9.98	3.90	5.10	1.90	1.10	.50	4.15	.50	42.07
1909	2.76	4.81	3.70	6.77	4.33	5.43	4.55	T	4.25	4.33	6.00	3.41	50.34
1910	2.60	4.57	T	3.81	5.40	3.15	6.55	3.80	7.30	4.70	.22	1.52	43.62
1911	1.50	2.60	3.60	7.85	1.60	2.72	.95	3.99	8.79	2.59	3.51	2.15	41.85
Means	2.62	2.66	3.99	3.93	4.28	4.59	3.68	2.98	3.62	2.23	3.34	2.34	39.85

* Interpolated from surrounding stations.
† Values for Greenville, nineteen miles distant.

CAZENOVIA, WOODFORD COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1895	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.74	3.76	6.25	.....
1896	1.55	1.60	*1.08	4.18	5.51	3.09	5.60	5.25	5.35	.....	.....	.....	.....

* Seven days missing.

CEDARVILLE, STEPHENSON COUNTY, ILLINOIS

Year	Jan	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1886	3.40	1.70	3.70	2.66	2.74	2.37	.....	4.12	1.09	3.00	1.02	1.22	.....
1887	2.49	5.00	1.62	.65	1.13	1.12	1.45	6.04	4.06	2.15	.72	4.28	30.71
1888	.64	.26	4.65	1.58	4.75	1.93	3.30	1.55	.81	1.87	2.40	2.21	25.95
1889	1.39	1.25	.87	2.72	3.32	1.65	4.31	.37	3.75	.....	.....	.....	.....
1890	.....	.....	.....	2.34	3.89	13.57	.50	4.93	1.30	5.23	1.96	.63	.....
1891	2.22	.....	3.04	2.67	2.82	.....	2.93	2.70	.....	.....	.....	.....	.....
1892	.....	.....	.....	4.66	7.78	9.61	.....	.....	.....	.....	.....	.....	.....
Means	2.03	2.05	2.78	2.47	3.79	5.04	2.46	3.28	2.20	3.06	1.52	2.08	28.33

NOTE—Values 1890–92, inclusive, are for Cockrell.

CENTRALIA, MARION COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1878	.....	.....	.....	.....	.....	.....	3.17	2.70	2.40	3.55	0.93	1.50	.....
1879	.....	.....	3.30	2.15	3.85	4.17	4.10	5.40	.....	.....	.....	3.00	.....
1880	3.60	2.80	4.40	3.50	5.75	2.80	7.80	.65	1.10	2.70	3.80	1.80	40.70
1881	1.50	1.60	2.00	3.50	2.30	5.35	.20	.60	4.20	6.00	5.50	2.67	35.42
1882	3.00	6.05	5.17	1.65	4.73	9.66	3.97	5.74	2.45	7.25	1.75	3.75	55.17
1883	1.31	10.35	3.62	4.65	3.15	8.47	6.95	3.06	.74	8.55	7.20	1.65	59.70
1884	.85	4.42	2.10	2.12	3.37	5.90	3.25	3.20	4.67	1.05	1.03	5.50	37.46
1885	1.07	.85	.32	7.45	2.82	9.30	1.63	3.30	5.87	3.82	4.02	4.02	44.47
1886	3.82	.....	3.27	2.99	3.20	3.89	1.85	3.54	6.16	.76	5.74	1.05	.....
1887	1.21	2.87	5.97	3.57	2.57	2.34	2.22	.....	.....	.....	.....	.....	.....
1888	2.30	1.80	2.17	1.40	3.62	6.99	3.98	7.80	2.50	3.10	7.50	2.37	45.53
1889	3.52	1.67	1.15	1.50	6.33	7.07	4.10	1.53	3.18	1.95	6.56	1.60	40.16
1890	10.38	5.26	7.45	6.65	.....	.....	2.29	2.92	6.32	1.44	2.43	1.40	.....
1891	1.21	3.40	2.24	1.88	3.09	5.32	.57	7.56	1.00	2.59	4.38	*1.80	35.04
1892	.....	.....	1.86	11.96	7.02	3.08	.....	.....	.....	.....	.....	.....	.....

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

CENTRALIA, MARION COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.91	2.94	.....
1900	.75	3.54	2.05	1.33	3.47	7.86	.77	.40	3.48	1.15	3.15	1.55	29.50
1901	1.28	2.25	3.85	1.99	.98	1.46	.95	3.52	1.50	2.94	2.16	4.08	26.96
1902	1.09	.95	3.89	1.98	1.98	5.03	3.73	5.27	2.70	1.10	3.11	3.88	34.71
1903	1.43	3.26	3.45	4.30	2.96	2.34	.92	4.97	2.59	3.60	.47	.....	.....
Means	2.39	3.40	3.24	3.59	3.60	5.35	2.91	3.60	3.18	2.92	3.62	2.61	40.40

* Interpolated from surrounding stations.

CHARLESTON, COLES COUNTY, ILLINOIS

Elevation, 720 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1870	.....	.....	.....	1.92	2.63	2.86	4.40	4.34	0.66	3.46	2.01	1.85	.....
1871	4.25	2.88	2.10	1.41	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*1880	6.38	6.37	6.00	6.00	7.00	2.75	3.00	3.38	2.50	2.10	2.50	2.70	50.68
1881	*1.45	5.25	*3.90	*2.00	*1.38	*5.75	1.12	*.87	3.95	7.30	8.20	3.50	44.64
1882	2.90	*8.60	5.10	3.81	5.80	7.70	1.82	*5.94	1.60	3.64	2.04	2.80	51.75
1883	1.20	9.10	*1.28	*3.03	*4.14	*3.94	*4.64	*1.78	*.80	*9.40	*4.73	*2.26	46.30
*1884	.90	5.44	2.75	4.16	5.00	6.87	3.65	2.20	4.70	2.80	1.83	5.45	45.75
1885	*2.25	2.56	.25	4.74	3.10	4.98	2.83	6.47	4.49	3.24	2.61	3.34	40.86
1886	2.80	1.04	3.32	2.73	3.56	2.69	3.66	2.90	4.02	.74	2.86	1.92	32.24
1887	1.02	3.80	3.40	2.60	3.51	.07	.56	2.30	3.32	.97	7.06	4.75	33.36
1888	2.97	2.70	3.12	2.43	4.82	6.77	2.35	3.25	1.42	2.37	4.35	2.43	38.98
1889	1.80	1.63	1.25	.90	4.19	†7.50	5.65	1.53	†2.90	2.01	†4.60	†1.00	34.96
1890	‡6.19	3.41	3.37	2.66	3.40	6.75	6.98	1.87	2.22	2.19	1.93	1.13	42.10
1891	.91	2.82	3.97	2.51	*.60	*4.25	*1.88	*4.95	1.43	1.47	5.59	1.90	32.28
1892	1.13	5.65	1.29	10.11	10.90	3.81	3.35	2.72	*1.20	*.85	*4.75	*.90	46.66
*1893	1.08	2.71	‡4.42	‡3.99	4.60	2.00	4.35	1.21	3.37	‡1.30	2.60	.59	32.22
*1894	1.53	1.46	3.33	1.81	1.02	2.25	3.84	2.23	4.60	.39	3.24	1.72	27.42
*1895	.57	.71	1.04	2.36	.73	2.86	3.37	†3.26	†2.74	.60	2.61	3.36	24.21
1896	1.02	1.99	1.85	1.30	6.41	8.12	10.04	3.18	6.53	.49	3.82	1.08	45.83
1897	4.47	2.28	5.26	6.41	2.93	6.60	1.96	.39	1.67	.42	5.42	3.05	40.86
1898	4.44	1.38	8.90	3.59	4.79	2.79	1.93	3.14	4.46	4.14	1.66	1.80	43.02
1899	2.97	2.55	2.75	.67	6.86	2.56	.71	1.41	.89	4.13	2.95	2.90	31.35
1900	.45	4.52	1.99	1.79	4.00	4.10	*4.76	4.73	3.22	3.63	2.81	1.23	37.23
1901	1.39	2.30	3.82	*2.18	2.87	*5.95	*1.20	*1.07	*1.46	*3.45	1.62	3.17	30.48
1902	.97	1.96	3.67	2.33	3.46	7.78	3.78	4.24	4.98	1.99	2.52	3.94	41.72
1903	1.68	2.97	1.77	4.41	.63	5.55	5.32	5.57	1.94	2.68	1.47	2.04	36.03
1904	3.92	1.20	9.42	4.54	4.80	1.96	3.67	4.93	5.80	.80	.18	1.84	43.06
1905	1.82	1.49	1.80	3.00	4.29	1.78	7.19	1.53	2.31	5.53	1.85	2.36	34.95
1906	3.31	1.54	4.80	1.32	3.12	2.98	2.92	1.96	4.18	1.41	4.34	3.68	35.56
1907	4.72	.34	4.42	2.35	2.79	3.75	7.10	3.59	.72	2.19	2.60	3.42	37.99
1908	1.28	5.10	3.05	3.60	6.96	3.42	2.94	.85	1.10	.18	3.51	1.38	33.37
1909	2.21	4.59	2.05	7.83	3.24	4.04	9.05	1.12	3.35	2.80	3.14	2.63	46.05
1910	2.01	2.92	.40	2.09	3.84	2.43	7.37	3.75	3.81	4.53	3.42	1.14	37.71
1911	3.46	1.62	2.31	5.30	.52	1.74	1.47	3.19	10.25	3.54	2.84	1.77	38.01
Means	2.29	3.18	3.24	3.27	3.88	4.22	3.91	2.90	3.11	2.67	3.27	2.36	38.78

* Values for 1880, 1884, 1893, 1894 and 1895 are for Mattoon, eleven miles distant.
† Estimated from surrounding stations.
‡ Values for Martinsville.

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

CHEMUNG, M'HENRY COUNTY, ILLINOIS

Elevation, 823 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1894	.....	.....	.....	3.34	3.02	3.56	0.76	1.28	8.33	1.87	2.27	0.60	.....
1895	1.47	.95	2.18	2.52	4.96	2.11	2.91	3.06	4.74	.66	2.10	2.59	30.25
1896	.99	1.93	3.48	6.78	4.18	3.18	5.10	2.27	8.56	1.06	2.58	.77	40.88
1897	5.06	1.77	5.25	4.66	1.67	6.36	4.73	2.00	1.18	.84	2.37	1.40	37.29
1898	2.89	2.78	4.25	2.20	3.71	5.97	2.54	5.66	2.72	3.41	2.09	.89	39.06
1899	.76	1.62	1.94	1.09	5.61	2.27	4.95	3.05	2.29	1.44	2.71	1.98	29.72
1900	1.49	3.73	1.49	1.36	1.78	2.11	4.73	6.96	4.67	2.57	2.83	.95	34.67
1901	1.43	1.27	4.54	.47	1.77	3.56	2.45	2.28	2.95	.66	.94	1.73	34.05
1902	.42	.80	1.83	.78	5.30	5.20	6.54	1.06	5.44	.....	.....	.....	.....
Means	1.81	1.85	3.12	2.58	3.55	3.81	3.86	3.07	4.54	1.56	2.24	1.36	33.70

CHESTER, RANDOLPH COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1891	.....	.....	.....	.....	.....	4.07	2.67	4.16	0.76	1.01	6.26	2.08	.....
1892	1.85	3.98	1.22	7.37	8.77	2.91	3.53	2.34	1.75	2.14	6.05	1.64	43.55
1893	.28	.94	2.49	4.27	4.13	2.26	2.75	.41	.....	.....	.....	.....	.....
1894	.....	.....	1.59	2.84	4.57	1.87	1.91	1.62	4.21	3.30	.58	3.98	.....
1895	3.58	.70	3.51	2.23	2.07	3.99	5.93	2.87	3.38	.41	4.38	4.72	37.77
1896	1.79	1.93	3.91	2.25	7.59	7.08	4.27	2.52	2.58	1.90	.....	.20	.....
1897	4.13	2.81	8.34	6.28	3.16	9.60	3.05	1.36	.75	.17	4.50	4.77	48.92
1898	3.93	1.98	8.90	3.48	8.49	3.79	6.34	4.23	3.33	4.97	1.23	2.23	52.90
1899	2.60	2.76	2.53	2.71	1.84	2.54	2.13	2.29	.80	3.36	1.75	2.48	27.77
1900	1.01	3.94	1.97	3.43	4.45	7.62	3.08	1.91	3.17	1.53	5.21	1.65	38.92
1901	1.00	1.60	3.39	2.99	1.56	1.72	.32	2.32	1.55	1.92	1.34	1.92	21.63
1902	1.54	1.39	4.06	2.85	3.61	3.27	2.62	4.77	3.48	1.41	3.97	4.08	37.05
1903	1.50	3.71	4.33	1.97	1.71	2.69	4.39	4.35	2.52	2.92	1.07	1.95	33.11
1904	2.74	2.02	9.15	5.47	4.25	4.86	3.57	3.13	7.42	1.42	.86	2.20	47.09
1905	3.05	2.19	3.34	4.20	3.99	1.87	13.56	2.34	9.26	4.72	2.18	2.78	53.50
1906	5.85	2.58	5.84	3.04	2.58	6.80	2.30	4.62	7.78	2.86	4.76	3.22	52.23
1907	5.56	1.30	2.63	2.38	5.48	4.74	4.83	6.26	2.22	2.96	3.80	3.58	45.74
1908	3.12	6.77	5.57	8.86	7.52	1.91	7.45	1.65	1.76	.10	2.87	.87	48.45
1909	2.83	4.07	5.21	7.23	4.58	2.90	7.25	.09	8.78	1.58	3.76	3.18	51.46
1910	2.12	3.71	.04	3.02	3.35	4.91	9.04	4.46	4.03	5.72	.28	1.56	42.24
1911	.38	3.12	1.38	6.04	1.86	2.82	1.58	5.96	7.00	4.38	3.37	3.08	40.97
Means	2.57	2.71	3.97	4.15	4.28	4.01	4.41	3.03	3.83	2.44	3.06	2.61	42.55

CHICAGO, COOK COUNTY, ILLINOIS

Elevation, 824 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1844	.....	.....	1.76	2.76	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1856	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.98	3.86	.....
1857	1.09	5.43	2.55	2.19	6.33	4.14	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1867	1.93	2.22	1.58	1.70	4.42	1.86	1.52	2.33	0.57	1.28	1.89	1.11	22.41
1868	1.28	.92	5.21	3.00	3.74	3.11	2.87	3.55	7.08	1.69	2.60	1.40	36.48
1869	1.97	2.23	1.33	4.30	5.69	5.03	3.26	1.32	.89	1.10	2.42	2.03	31.57
1870	1.95	.86	1.81	1.15	.80	1.70	3.71	2.07	2.82	2.43	1.16	2.46	22.92
1871	4.13	1.45	2.66	3.70	3.90	5.56	2.52	2.01	.74	1.88	3.62	3.44	35.61
1872	.68	.84	3.79	3.03	3.24	3.45	3.09	2.59	6.43	.65	1.06	.22	29.07
1873	2.56	.47	.89	6.22	7.20	1.44	4.04	1.58	3.53	2.43	1.61	4.44	36.41
1874	3.47	1.51	2.15	2.67	2.08	3.25	.58	3.15	3.76	2.55	2.83	.63	28.63
1875	.96	1.99	1.43	2.32	3.64	5.17	7.18	3.29	4.39	4.32	.75	2.62	38.06
1876	3.22	3.90	4.04	2.07	1.85	5.96	3.11	3.66	3.74	1.20	3.25	.48	36.48

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

CHICAGO, COOK COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1877	1.91	.06	5.37	2.42	1.81	6.04	2.98	3.06	2.02	6.51	6.08	2.75	41.01
1878	1.31	2.12	4.39	5.57	5.22	3.02	6.09	3.66	1.99	5.17	.33	2.58	41.96
1879	.54	1.47	2.37	1.93	3.89	3.18	5.58	.45	1.18	2.72	4.93	2.47	30.71
1880	3.53	2.91	2.25	5.20	4.97	3.50	3.07	4.47	2.25	3.19	.87	1.11	37.32
1881	.87	5.98	2.99	1.84	1.85	5.98	4.31	.54	4.34	6.89	5.97	2.67	44.18
1882	1.55	2.24	3.43	6.72	5.52	5.71	3.43	4.96	.91	3.40	1.48	1.99	41.34
1883	1.74	4.74	.42	3.72	7.32	5.61	5.53	1.21	1.36	7.36	5.26	1.59	45.86
1884	1.39	3.27	5.16	3.05	1.53	2.11	3.71	2.50	2.29	3.59	1.80	4.21	34.61
1885	3.18	2.01	.57	4.00	3.17	5.20	2.44	11.28	2.97	3.87	2.33	3.35	44.37
1886	3.56	1.51	1.79	1.29	1.00	.94	1.53	3.38	6.93	1.42	1.66	1.76	26.77
1887	3.13	5.10	.89	.46	1.38	1.63	1.05	3.35	4.03	2.03	2.41	3.67	29.13
1888	1.56	1.51	2.99	2.13	6.22	1.66	3.93	2.10	.98	2.95	2.89	1.94	30.86
1889	1.64	1.31	1.43	2.35	5.38	2.93	9.56	.39	2.75	1.82	3.49	1.90	34.95
1890	2.98	2.42	2.10	3.28	5.13	3.25	2.57	2.58	1.39	4.20	1.59	1.25	32.69
1891	1.99	1.95	2.13	3.14	2.09	2.42	2.47	4.52	.32	.36	3.83	1.32	26.54
1892	1.99	1.57	2.21	2.17	6.77	10.58	2.23	1.35	1.34	1.54	2.68	1.63	36.56
1893	2.08	2.44	1.69	4.16	4.93	3.59	3.08	.18	1.98	1.75	2.45	2.14	27.47
1894	1.55	2.13	2.66	2.65	3.35	1.96	.60	.60	8.28	.84	1.18	1.66	27.46
1895	2.15	1.60	1.32	.86	1.99	1.79	2.42	6.49	.89	.51	5.60	6.76	32.38
1896	1.12	3.48	1.26	2.79	4.16	2.82	3.61	3.52	6.70	1.36	2.16	.16	33.14
1897	4.53	2.22	3.56	2.23	.84	3.60	1.47	1.70	.84	.18	3.05	1.62	25.85
1898	3.54	2.59	4.60	.76	2.23	5.30	1.94	3.03	3.16	3.26	2.25	1.11	33.77
1899	.58	1.60	2.11	.14	4.35	2.71	6.66	.91	2.39	2.09	1.14	1.81	26.49
1900	1.21	3.52	1.58	1.02	3.59	2.06	4.64	4.24	1.56	1.35	3.30	.58	28.65
1901	1.15	2.05	3.38	.33	2.18	2.42	4.25	2.00	2.92	1.29	.35	1.70	24.52
1902	.66	1.53	4.16	2.26	5.06	6.45	5.78	1.44	4.83	1.45	2.03	1.90	37.57
1903	1.09	3.03	1.67	3.77	.93	1.62	4.78	3.49	4.00	1.09	.34	2.28	28.09
1904	2.25	1.71	4.57	3.01	1.54	.55	2.76	4.00	2.65	1.58	.31	1.21	26.14
1905	1.33	1.95	2.43	3.03	5.14	3.27	5.02	4.46	4.18	1.82	2.05	.68	35.36
1906	1.67	2.37	1.61	1.86	2.09	1.87	4.84	1.43	5.54	2.05	3.03	2.46	30.87
1907	4.21	1.00	2.94	2.37	3.50	3.64	3.15	4.22	4.49	.93	1.92	2.73	35.10
1908	2.05	3.72	3.48	2.81	6.74	1.48	1.45	6.35	2.09	.81	2.67	1.18	24.83
1909	1.96	5.82	1.63	7.73	2.18	5.09	1.77	6.20	3.60	1.20	3.84	4.18	43.22
1910	3.97	.89	.29	3.84	4.67	.91	1.79	3.03	3.90	1.79	1.31	1.32	26.86
1911	1.17	2.27	1.45	3.03	3.37	2.54	2.65	3.72	4.03	3.79	3.27	2.54	33.83
Means	2.05	2.35	2.47	2.83	3.68	3.44	3.45	3.92	3.09	2.57	2.53	2.10	33.05

CHICAGO HEIGHTS, COOK COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1901	.....	.....	.....	.....	.....	2.51	3.39	2.24	2.98	1.80	.....	.....	.....
1902	0.43	0.88	4.54	2.01	4.04	13.24	5.40	1.78	5.55	1.83	2.37	1.55	43.62
1903	1.15	2.62	2.34	4.32	3.53	1.91	5.50	4.59	5.40	1.26	.68	2.07	35.37
1904	2.21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	1.26	1.75	3.44	3.16	3.78	5.89	4.76	2.87	4.64	1.63	1.52	1.81	39.50

CLINTON, DEWITT COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1910	1.95	1.24	0.29	2.93	5.50	1.51	3.75	2.41	3.66	2.29	1.89	1.47	28.89
1911	2.46	1.51	1.96	4.04	2.63	1.87	2.77	5.09	10.91	3.04	.....	1.95	.....
Means	2.20	1.38	1.12	3.48	4.06	1.68	3.26	3.78	7.28	2.66	.....	1.71	28.89

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

CLINTON, CLINTON COUNTY, IOWA

Elevation, 593 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1865	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.10	1.00	3.00	.....
1866	2.80	4.10	3.75	2.90	2.65	4.80	6.20	7.75	.....	3.10	.50	3.50	.....
1867	2.50	4.00	6.00	1.75	7.00	3.50	2.00	4.25	1.85	.96	.....	1.50	.....
1868	.75	1.00	9.50	6.75	10.05	6.00	3.60	1.60	6.60	1.20	4.45	1.35	52.85
1869	1.65	5.31	1.65	4.71	4.60	5.80	6.45	8.45	4.00	1.50	2.15	2.70	48.97
1870	4.50	.30	4.25	.50	3.25	2.75	3.00	3.20	2.65	2.50	.76	.52	28.18
1871	1.35	1.20	4.50	4.75	.75	4.25	.....	.....	.....	.....	.....	.....	.....
1878	.50	2.40	3.70	3.70	5.85	5.20	1.70	4.25	1.95	5.00	1.20	2.17	37.72
1879	1.37	1.00	1.71	1.98	4.97	4.59	8.07	2.40	.82	1.54	4.25	1.28	33.98
1880	2.66	1.40	1.99	4.34	4.20	4.98	2.56	4.34	6.57	1.91	1.17	.78	36.90
1881	1.89	4.91	4.13	2.00	2.12	8.18	2.27	1.33	4.01	5.55	2.28	2.44	41.16
1882	.48	1.10	4.16	7.40	4.16	9.05	5.51	2.61	1.34	2.69	1.40	2.15	42.05
1883	1.25	4.60	.76	2.36	7.10	5.58	4.29	.52	1.68	4.79	4.17	1.58	38.68
1884	.74	2.16	2.71	2.61	5.26	4.55	5.08	2.44	7.89	4.16	1.62	3.82	43.04
1885	1.56	2.32	.19	3.80	2.43	2.54	4.92	10.02	3.42	2.54	.74	3.73	38.21
1886	3.15	1.91	4.45	1.93	4.23	1.27	.76	1.82	3.89	4.29	1.00	1.04	29.74
1887	2.52	4.20	1.32	1.21	2.72	2.45	2.95	3.84	4.44	2.73	1.41	3.22	33.01
1888	1.59	1.06	3.45	1.48	6.46	2.45	7.07	2.02	.97	1.97	4.19	3.05	35.76
1889	2.05	1.07	1.19	2.61	3.53	4.94	7.21	1.06	3.44	1.36	.69	1.68	30.83
1890	2.35	1.73	2.97	2.72	4.43	6.50	.40	3.12	1.97	3.76	1.45	.82	32.22
1891	3.84	1.42	2.99	2.83	3.57	3.11	4.14	3.89	.68	1.46	2.81	2.64	33.38
1892	1.31	1.76	1.81	4.43	8.41	9.39	4.49	1.81	1.20	.63	2.18	*3.22	40.64
1893	2.01	1.68	2.75	5.48	3.80	3.22	2.26	1.20	4.25	.68	1.77	1.29	30.39
1894	2.02	1.91	2.80	1.92	4.77	2.54	.39	1.74	5.26	1.84	1.62	.63	27.44
1895	1.89	.67	1.08	.28	5.79	4.68	4.69	1.87	3.40	1.04	2.75	2.24	30.38
1896	1.16	1.92	.95	4.33	4.90	3.10	7.13	2.36	4.30	1.68	.72	.82	33.37
1897	3.27	1.61	3.72	2.36	.98	3.68	1.69	.54	2.00	.37	2.09	1.46	23.77
1898	3.60	2.37	4.73	3.53	4.47	8.06	1.89	7.87	2.80	4.97	1.42	.42	46.15
1899	.27	1.45	1.89	2.25	8.38	3.01	3.54	3.91	.76	1.48	1.05	2.32	30.31
1900	1.31	2.78	3.24	2.24	4.77	1.70	6.32	5.32	4.61	2.73	1.60	.26	36.88
1901	1.35	1.40	3.86	.80	1.72	3.17	4.26	.48	2.52	.81	.82	.88	22.07
1902	.63	1.18	2.19	1.45	6.04	9.90	7.79	4.08	3.79	3.15	2.51	2.09	44.80
1903	.83	1.29	2.36	4.93	5.45	1.66	5.27	4.79	6.12	1.85	.78	1.00	36.33
1904	2.25	.95	4.01	3.40	2.50	1.64	3.78	5.36	2.67	.59	.10	2.85	30.10
1905	.69	2.44	3.09	3.69	5.95	4.02	1.48	4.11	3.81	4.45	2.48	1.42	37.63
1906	3.25	2.37	2.86	2.22	4.44	3.47	5.42	5.07	2.54	1.41	3.46	2.05	38.56
1907	3.76	.81	2.10	2.56	4.45	3.60	8.53	7.73	4.47	1.59	1.31	.88	41.79
1908	.68	2.56	3.08	2.70	6.66	4.03	3.64	5.57	1.63	.58	3.31	.49	34.93
1909	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1910	2.51	.67	.35	3.55	3.19	.55	1.68	2.41	5.46	.73	.58	1.24	22.92
1911	1.33	4.08	1.43	5.33	2.15	1.69	3.44	5.73	5.25	1.63	4.53	1.76	38.35
Means	1.89	2.07	2.91	3.08	4.57	4.25	4.11	3.71	3.38	2.29	1.91	1.80	35.65

* Interpolated.

COATSBURG, ADAMS COUNTY, ILLINOIS

Elevation, 738 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1864	2.70	0.53	1.53	10.00	5.00	4.00	1.50	3.00	3.50	4.00	3.01	5.65	44.42
1865	.15	3.45	4.55	5.03	.37	8.12	10.00	1.37	7.00	3.01	.12	1.25	44.42
1870	.....	.....	.....	.....	1.30	2.18	6.00	6.70	7.30	4.90	1.51	1.60	.....
1871	3.80	2.80	4.80	3.00	4.60	4.00	2.80	5.20	2.60	7.60	4.03	1.60	46.83
1872	1.20	1.96	5.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	.....	1.88	1.98	1.87	4.00	4.10	.08	5.53	6.60	1.30	1.50	.80	.....
1887	1.45	3.55	.87	2.43	.....	2.82	2.66	1.07	.....	.81	1.59	.....	.....
1888	2.99	2.22	4.24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1889	.....	.....	.....	.....	8.25	3.48	3.70	1 05	.....	3.95	.....	.....	.....
1890	1.21	1.21	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.06	.....
1895	.....	.....	.....	.....	.....	.....	5.88	4.90	2.29	.34	3.36	3.48	.....
1896	1.00	.....	.94	.....	.....	.....	.....	.....	4.46	1.65	1.82	.66	.....
1897	6.70	.87	4.16	4.09	1.75	4.31	7.85	1.22	.34	.53	3.10	2.26	37.18
1898	3.71	2.26	7.09	4.83	6.63	5.43	3.09	2.11	8.89	2.80	2.89	1.53	51.26

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

COATSBURG, ADAMS COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1899	†0.46	1.80	2.50	1.34	8.19	2.25	3.31	4.95	2.53	3.13	2.66	1.32	34.44
1900	2.25	5.73	.45	1.26	4.79	1.45	1.57	3.29	4.04	4.07	.91	.31	30.12
1901	1.70	1.07	3.09	2.42	.45	6.66	2.38	.32	2.51	.94	1.62	2.27	25.43
1902	.48	1.11	4.31	2.77	4.10	9.90	3.87	4.53	2.01	2.21	2.85	2.80	40.94
1903	1.28	1.95	2.54	5.15	3.68	4.50	2.24	4.23	4.42	1.77	.88	1.17	33.81
1904	3.42	1.20	3.77	6.44	5.27	6.21	3.93	4.65	8.38	.16	.36	1.67	45.46
1905	1.19	.95	1.53	2.42	3.04	4.55	4.09	2.95	5.88	3.98	1.93	1.29	33.80
1906	3.00	2.19	2.40	2.95	2.08	4.02	2.26	5.68	5.56	.82	1.86	1.54	34.36
1907	5.42	T	3.63	2.59	2.14	4.30	6.38	7.12	1.92	1.25	1.49	1.75	37.99
1908	.97	3.28	.73	3.03	6.40	5.90	5.89	2.25	2.31	.97	3.80	.80	36.33
1909	1.68	3.39	2.13	5.89	7.46	2.92	5.91	.98	4.90	2.94	3.54	2.36	44.10
1910	.29	.25	.15	2.85	6.62	2.45	4.96	.41	5.36	1.02	.05	.72	25.13
1911	2.64	1.56	.....	4.67	1.42	3.22	3.41	1.29	10.79	1.95	2.60	2.60	.....
Means	2.16	1.97	2.84	3.75	4.26	4.40	4.07	3.25	4.71	2.34	2.06	1.79	38.00

† Estimated from surrounding stations.
Values for 1864 and 1865 are for York Neck, same county.
Values for 1870–1872, inclusive, are for Quincy, thirteen miles distant.
Values for 1886–1888, inclusive, are for Payson, fifteen miles distant.
Values for 1889 and 1890 are for Quincy.

COBDEN, UNION COUNTY, ILLINOIS

Elevation, 656 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
†1875	0.95	2.71	5.88	4.09	7.98	7.11	11.09	2.01	0.38	2.09	5.25	1.51	51.05
1876	13.25	2.48	8.82	4.48	5.01	7.76	4.46	9.41	3.14	1.40	2.02	.78	63.01
1877	1.80	.70	3.87	4.75	4.45	7.12	1.64	3.47	5.95	5.33	4.58	4.78	48.44
1878	3.16	1.86	2.28	5.66	5.73	3.91	2.82	3.66	2.35	4.25	3.08	4.80	43.64
1879	1.70	2.10	2.39	1.48	2.65	7.02	4.46	12.51	1.40	5.75	4.93	5.59	51.98
1880	4.58	5.38	4.20	4.67	7.27	4.82	3.78	2.20	3.48	4.54	4.28	3.29	52.49
1881	2.79	5.34	1.99	2.29	2.57	5.35	.00	.38	1.91	6.51	6.10	2.17	37.40
1882	4.39	8.17	4.52	4.09	9.77	3.04	3.09	4.19	3.47	3.06	6.04	2.97	55.80
1883	2.25	8.19	3.93	5.75	6.64	8.21	2.86	4.02	.51	7.21	6.85	5.14	61.56
1884	2.01	5.38	4.05	3.80	4.99	7.44	5.49	2.65	3.33	1.42	2.54	9.57	52.67
1885	4.64	1.23	1.43	2.69	2.24	6.89	2.19	4.13	4.54	3.43	1.80	2.92	38.13
1886	3.18	2.33	4.05	3.45	3.71	3.84	1.16	2.63	4.33	.74	6.65	3.25	39.32
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
†1895	.....	.....	.....	.....	2.10	.....	6.52	2.41	.....	.....	.....	.....	.....
1896	*1.51	1.55	3.72	2.89	9.30	5.50	3.76	2.24	2.38	2.32	3.75	.89	39.81
1897	4.47	4.47	12.64	8.31	2.00	4.67	2.99	2.05	1.06	.77	5.13	5.15	53.71
1898	4.20	1.37	14.16	4.28	5.76	7.83	7.35	4.81	5.21	6.42	1.60	1.69	64.68
1899	5.76	3.52	4.04	4.17	6.06	4.26	4.23	1.42	2.44	4.65	1.91	4.17	46.63
1900	1.70	4.09	2.28	2.70	6.57	9.52	4.52	.51	2.55	2.20	4.00	2.90	43.54
1901	1.34	2.45	5.73	3.74	1.69	2.57	1.20	5.96	.77	1.97	1.28	5.68	34.38
1902	1.52	2.53	4.22	3.04	3.13	2.78	.82	4.45	3.42	.84	4.92	6.36	38.03
1903	2.26	4.76	5.87	3.54	3.16	2.25	3.22	1.85	1.31	3.59	2.22	2.82	36.85
1904	4.05	2.90	6.75	4.28	2.54	5.84	2.83	4.73	9.11	.90	.32	2.55	44.80
1905	3.45	2.10	3.03	4.83	4.34	2.10	9.55	2.85	2.94	6.46	2.24	3.50	47.39
1906	6.45	2.36	6.70	1.17	.67	4.77	3.80	5.07	8.72	1.67	7.75	5.50	54.63
1907	5.82	1.56	2.95	3.11	5.44	2.77	4.18	5.41	.79	4.22	5.17	3.10	44.52
1908	3.86	8.06	4.60	8.10	5.16	1.70	3.37	3.75	1.92	.00	4.90	1.07	46.49
1909	2.25	8.26	5.39	9.08	4.33	1.75	10.93	1.39	9.17	.86	4.31	3.14	60.86
1910	2.43	3.53	.10	6.19	3.66	4.29	10.82	1.89	2.10	11.43	.26	2.60	49.30
1911	.65	3.27	2.22	12.07	1.31	3.59	1.60	6.52	6.13	2.11	4.34	2.96	46.77
Means	3.49	3.67	4.63	4.60	4.49	4.95	4.31	3.75	3.39	3.40	4.22	3.61	48.32

* Interpolated from surroundiug stations.
† Values from 1875–1886, inclusive, and the year 1895 are for Anna.
Values 1896–1911 inclusive, are for Cobden. The stations are five miles apart.

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

COLCHESTER, M'DONOUGH COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
*1902	.....	.....	.....	.....	.....	.....	.....	7.86	3.06	2.42	1.71	2.39	.....
*1903	0.88	1.48	2.42	3.87	2.85	1.57	2.32	4.37	4.25	2.42	1.41	.87	30.71
*1904	2.93	.99	4.05	4.45	4.27	4.30	5.75	4.77	3.27	.18	.26	1.45	36.67
1905	1.16	1.88	1.28	3.36	4.12	7.03	2.33	5.22	2.49	3.66	2.12	1.10	35.75
1906	2.68	1.91	2.83	2.73	2.24	2.72	1.11	2.02	3.89	1.44	2.33	1.71	27.61
1907	4.82	.11	4.02	1.86	2.33	2.24	8.00	5.58	1.29	.57	1.07	1.56	33.45
1908	.80	3.30	1.85	2.17	9.06	5.59	2.06	1.18	1.41	.65	3.29	.52	31.88
1909	2.91	3.15	1.54	5.38	3.44	.....	.....	.....	.....	.....	.....	.....	.....
Means	2.31	1.83	2.57	3.40	4.05	3.91	3.60	4.43	2.81	1.91	1.74	1.37	32.68

* Values from 1902-1904, inclusive, are for Fandon, four miles distant.

COLLINSVILLE, MADISON COUNTY, ILLINOIS

Elevation, 600 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1883	1.06	5.36	2.30	2.76	1.92	6.48	2.03	0.82	0.04	5.69	4.22	1.02	33.70
1884	.82	4.46	2.88	3.44	4.21	3.73	2.21	1.82	3.66	1.64	2.16	5.68	36.71
1885	3.04	.76	.45	4.32	2.56	7.42	2.37	2.93	6.79	5.52	2.54	1.55	40.24
1886	3.49	1.59	2.77	1.71	3.72	7.55	.04	3.45	5.12	.78	2.74	1.88	33.84
1887	.60	4.30	3.80	3.99	5.26	2.37	1.77	.84	2.33	.75	5.01	3.46	34.78
1888	1.93	2.18	3.74	2.36	5.68	8.97	5.25	3.17	2.26	2.85	4.40	2.03	.....
1889	.....	4.87	1.70	1.72	3.11	3.66	2.81	1.85	5.13	1.59	4.64	1.30	.....
1890	6.00	3.88	4.69	4.01	3.13	3.56	.88	.95	2.31	.85	1.92	1.31	33.49
1891	1.36	2.78	2.24	2.17	2.26	4.15	2.19	2.87	1.71	*.60	*5.40	1.29	29.02
1892	1.53	4.83	1.95	10.27	.....	4.87	5.56	2.96	1.66	1.72	3.45	2.04	.....
1893	.....	2.90	5.21	.....	.....	2.92	.....	.....	.....	.....	.....	.....	.....
Means	2.20	3.47	2.88	3.68	3.54	5.06	2.51	2.17	3.10	2.20	3.65	2.16	34.54

* Interpolated from surrounding stations.

CORDOVA, ROCK ISLAND COUNTY, ILLINOIS

Elevation, 599 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1893	1.26	1.18	3.15	6.30	2.42	3.81	1.13	1.27	4.70	0.49	1.83	1.54	29.08
1894	1.83	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1895	1.89	.34	1.28	.39	2.25	2.62	5.12	2.08	3.03	.70	2.75	2.33	24.78
1896	.93	1.45	.79	4.60	4.88	2.15	6.81	3.53	.....	2.04	.....	.....	.....
1897	.....	1.52	2.34	3.63	1.15	2.30	2.47	.68	.91	.40	1.79	1.47	.....
1898	3.62	.....	.....	.....	5.28	3.96	1.15	7.07	3.38	4.25	.....	.50	.....
Means	1.91	1.12	1.89	3.73	3.20	2.97	3.34	2.93	3.00	1.58	2.12	1.46	26.93

DAKOTA, STEPHENSON COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug	Sept.	Oct.	Nov.	Dec.	Annual
1909	2.65	1.49	1.18	8.29	3.39	4.17	1.37	7.49	2.23	0.79	3.77	3.53	40.35
1910	2.43	.55	.41	3.32	2.32	.90	1.45	4.06	1.86	.59	1.37	.48	19.74
1911	.50	2.20	.37	3.51	2.97	4.95	1.40	8.03	5.78	3.52	4.04	.....	.....
Means	1.86	1.41	0.65	5.04	2.89	3.34	1.40	6.53	3.29	1.63	3.06	1.34	30.04

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

DANVILLE, VERMILION COUNTY, ILLINOIS

Elevation, 613 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1886	.....	.....	.....	1.52	4.77	5.11	1.71	.....	.....	.....	.....	.....	.....
1895	.....	.....	.....	.....	1.33	2.14	3.65	2.42	3.29	0.49	3.33	5.13	.....
1896	1.06	0.45	0.73	2.03	5.07	3.18	6.27	3.27	.....	.....	6.60	.50	.....
1897	3.70	1.00	4.24	4.00	2.14	4.58	2.12	.74	.15	.49	5.96	2.43	31.55
1898	3.66	1.79	7.93	2.47	3.98	6.37	2.24	3.89	4.00	5.06	3.08	1.86	46.33
1899	2.68	2.55	3.24	1.33	3.91	1.49	.....	.57	2.54	3.36	2.46	.....	.....
1900	.48	2.13	.99	1.02	5.45	1.17	7.25	4.77	1.80	2.01	3.56	.11	30.74
1901	1.36	.56	2.28	.93	3.04	2.00	T	2.05	.40	2.13	1.27	2.84	18.86
1902	.98	.27	2.60	1.88	2.60	.....	.80	1.59	.....	.....	.....	.....	.....
1903	.....	.....	2.22	6.37	4.75	2.65	1.19	.....	.....	.....	.....	.....	.....
1904	4.44	1.95	7.67	3.05	1.92	3.94	3.55	5.20	2.72	.90	.07	1.23	36.64
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1910	.....	.....	.....	.....	.....	.....	4.30	2.12	6.84	2.45	1.85	1.61	.....
1911	2.68	1.67	1.93	3.67	.73	1.85	.97	3.73	5.91	3.54	3.36	1.76	31.80
Means	2.34	1.37	3.38	2.57	3.31	3.13	2.84	2.76	3.07	2.27	3.15	1.94	32.65

NOTE—Values from May, 1895-April, 1897, inclusive, are for Catlin, six miles distant.

DAVENPORT, SCOTT COUNTY, IOWA

Elevation, 613 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1871	.....	.....	.....	.....	.....	3.68	2.30	4.85	0.30	3.19	3.33	1.61	.....
1872	0.13	0.10	1.82	5.06	4.46	3.78	3.80	8.91	5.30	.61	1.86	.61	36.44
1873	3.56	.77	1.43	3.96	6.37	2.16	2.37	.51	1.00	1.48	.63	3.84	28.08
1874	4.34	.74	1.34	2.64	3.45	5.37	3.10	3.68	7.86	1.30	2.47	.50	36.79
1875	.38	1.09	.88	2.30	2.01	4.91	9.36	1.73	4.05	1.63	.57	3.08	31.99
1876	3.47	3.63	4.35	5.39	6.70	4.25	4.82	4.27	5.50	1.54	2.54	.36	46.82
1877	1.41	.07	3.91	3.28	2.82	5.80	3.42	3.21	1.45	4.88	2.53	2.32	35.10
1878	.36	1.09	2.21	2.89	5.14	4.36	2.19	5.07	1.82	4.21	.90	.97	31.21
1879	.79	1.09	1.80	1.54	5.83	4.57	5.87	4.33	1.43	.92	4.70	1.02	33.89
1880	3.13	1.72	2.68	4.50	5.09	7.21	4.31	5.90	4.87	.94	1.23	1.15	42.73
1881	1.34	4.14	3.33	1.11	1.34	7.94	.91	.83	5.59	6.85	2.19	1.71	37.28
1882	.90	.62	2.90	3.15	5.49	8.43	4.41	2.29	1.39	3.75	1.49	1.78	36.60
1883	1.16	4.42	.73	3.33	5.46	4.38	3.66	1.02	.73	5.13	3.58	.99	34.59
1884	.75	.98	3.27	.77	3.79	3.07	4.51	3.84	4.79	7.17	1.49	3.68	38.11
1885	2.10	1.20	.17	2.47	1.94	2.08	1.66	12.68	4.19	2.71	1.20	1.95	34.35
1886	2.22	1.52	3.08	1.84	3.73	.49	.43	2.67	2.43	3.47	.74	.53	23.15
1887	1.43	4.87	.77	1.17	1.76	1.66	3.09	3.23	5.45	3.41	1.13	3.26	31.23
1888	1.54	1.17	2.70	1.57	9.23	3.86	7.31	2.79	1.38	2.81	3.54	2.59	40.49
1889	.95	1.44	1.74	3.89	6.34	5.59	8.25	1.11	3.27	1.26	2.17	1.60	37.61
1890	2.49	1.10	2.34	.86	4.33	4.51	.85	1.66	2.34	3.63	1.37	.62	26.10
1891	2.38	.89	1.68	3.30	2.74	3.56	3.29	5.54	1.50	1.37	3.56	1.64	31.45
1892	1.60	1.38	3.06	5.41	8.84	10.79	4.16	1.53	2.09	.55	2.01	2.73	44.15
1893	1.14	1.69	2.25	4.50	2.67	3.82	1.75	1.12	3.36	.80	2.56	1.67	27.33
1894	1.33	1.48	1.88	1.37	1.93	2.16	.44	2.02	3.02	1.02	1.26	.61	18.52
1895	1.27	.38	1.57	.32	2.28	1.22	5.16	4.79	4.30	.81	2.50	2.54	27.14
1896	.89	1.45	.84	3.41	4.03	2.28	5.68	3.12	3.98	1.67	.68	.65	28.68
1897	3.58	1.57	2.82	3.69	1.91	1.37	3.21	.68	1.52	.35	1.68	1.53	23.91
1898	3.68	1.86	4.85	3.01	6.73	3.53	1.85	4.96	3.14	3.38	1.37	.59	38.95
1899	.31	1.91	1.94	2.94	7.35	4.02	2.84	4.47	.82	1.46	.90	2.68	31.64
1900	1.27	2.45	2.92	2.10	4.68	1.01	3.49	4.90	3.66	2.00	1.48	.21	30.17
1901	1.10	1.59	2.57	.88	1.37	3.02	1.48	.46	2.29	.45	.79	1.33	17.33
1902	.60	.96	1.76	1.40	4.57	7.55	6.38	7.25	3.20	2.81	1.95	1.88	40.31
1903	.79	1.67	2.06	3.42	5.52	2.28	4.47	4.68	7.09	2.27	.70	.78	35.73
1904	2.20	.72	2.70	2.05	2.64	1.44	3.34	3.60	3.98	1.15	.18	2.21	26.21
1905	.63	1.99	2.21	3.45	3.12	7.68	.99	1.93	3.48	2.73	2.01	1.32	31.54
1906	2.14	2.21	2.20	1.92	2.60	2.69	2.26	3.50	2.47	1.67	2.66	1.61	27.93
1907	3.55	.22	1.79	1.90	4.33	2.07	7.13	6.48	3.55	.70	1.08	.49	33.29
1908	.69	2.37	2.24	2.22	5.13	4.57	3.30	6.23	1.12	.87	2.46	.40	31.60
1909	1.72	2.32	1.60	6.02	3.23	2.80	4.68	2.34	1.50	2.37	3.92	3.12	35.64
1910	1.69	.59	.39	3.69	3.42	.91	2.86	4.31	2.40	.61	.22	.85	21.94
1911	1.41	4.10	1.08	3.63	2.25	2.00	5.12	4.92	5.13	1.57	3.84	1.52	36.57
Means	1.66	1.64	2.15	2.81	4.16	3.88	3.67	3.74	3.14	2.23	1.89	1.57	32.56

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

DECATUR, MACON COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1868	.....	.....	.....	.....	.....	.....	.....	2.49	.....	.....	.....	.....	.....
1869	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.95	3.65	.....
1870	2.85	0.95	2.97	1.50	0.80	1.50	1.50	4.00	2.60	3.30	1.68	2.25	25.90
1871	4.60	1.65	3.05	.....	2.35	1.90	1.85	1.05	.25	2.50	1.95	1.15	.....
1872	1.10	1.25	2.32	2.00	2.85	7.50	4.60	1.55	2.61	.....	.90	1.45	.....
1873	3.30	2.65	.65	6.40	2.95	1.65	3.80	.....	2.90	1.95	2.40	2.75	.....
1874	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1875	.....	.....	.....	1.81	9.42	6.41	12.49	4.77	2.23	2.82	1.25	1.37	.....
1876	3.26	3.56	5.84	3.57	3.13	9.35	3.46	3.80	7.41	4.40	2.32	.74	.....
1877	1.10	.20	7.89	.....	.....	7.62	1.90	3.16	4.64	.....	.....	.....	.....
1878	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1879	.....	.....	.....	.....	.....	.....	.....	.....	2.02	3.55	4.06	4.72	.....
1880	.....	.....	.....	.....	.....	.....	.....	.....	.....	.75	3.91	.....	.....
1886	2.50	.90	2.60	1.60	3.80	6.40	.30	5.80	5.70	.20	2.20	.85	32.85
1887	.....	.....	.....	.....	.....	.....	.....	1.95	.....	.....	.....	.....	.....
1892	.....	.....	.....	4.20	5.24	.....	3.11	1.84	2.95	T	5.46	T	.....
1893	.95	.....	3.82	.....	.....	.....	.....	.....	.....	.....	.....	1.41	.....
1894	1.83	2.39	2.79	3.06	1.90	2.23	2.33	1.64	2.94	.42	1.77	2.65	25.95
1895	1.19	.94	1.18	2.75	1.07	4.40	3.42	1.35	4.47	.55	3.12	6.47	30.91
1896	.97	2.91	1.44	1.56	4.75	4.00	7.12	3.00	5.80	.66	2.81	.32	35.34
1897	3.83	1.23	5.08	3.87	3.21	4.22	3.03	1.40	.41	.28	4.57	2.54	33.67
1898	5.18	2.71	9.85	3.36	5.74	2.39	1.07	2.16	5.47	5.34	2.96	1.68	47.91
1899	1.89	2.43	2.58	.59	7.01	2.11	1.02	2.56	1.50	4.20	2.01	2.37	30.27
1900	.59	5.89	1.84	1.46	4.78	4.18	7.40	4.71	4.34	1.33	3.48	.92	41.32
1901	1.78	1.17	3.23	1.98	2.00	5.33	.49	.86	1.27	3.18	1.54	4.43	27.26
1902	1.06	1.42	3.93	2.26	2.80	9.03	2.43	7.01	4.98	2.08	2.45	3.83	43.28
1903	1.60	4.13	2.48	4.84	3.66	2.61	4.57	5.16	2.67	4.07	1.74	2.16	39.69
1904	2.73	1.33	7.29	3.39	2.67	2.18	4.44	5.55	9.48	.18	.07	1.84	41.15
1905	2.02	1.72	1.56	3.11	4.54	1.69	3.82	1.44	3.05	4.76	1.70	1.90	31.31
1906	3.04	1.90	4.93	3.02	6.73	1.78	3.45	5.35	3.47	2.46	4.63	3.51	44.27
1907	7.47	.30	4.75	2.94	2.89	4.29	7.03	7.36	2.08	1.01	2.07	2.89	45.08
1908	1.64	4.29	3.87	4.54	10.23	3.81	2.25	1.25	1.27	.71	2.09	1.67	37.62
1909	2.43	4.31	1.27	5.58	5.30	3.14	6.18	2.20	2.79	3.59	3.13	2.40	42.32
1910	1.95	1.72	.58	3.00	7.16	3.27	3.23	3.81	3.94	2.20	2.84	1.98	35.68
1911	2.67	1.50	1.83	5.11	3.60	2.44	1.45	4.08	12.00	2.59	3.31	1.41	41.99
Means	2.44	2.14	3.45	3.13	4.26	4.06	3.61	3.26	3.76	2.27	2.67	2.12	36.69

DIXON, LEE COUNTY, ILLINOIS

Elevation, 725 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
*1886	4.29	2.79	3.68	3.60	6.32	.....	0.32	1.33	2.94	.....	1.41	1.32	.....
*1887	4.21	4.89	1.66	1.10	2.51	2.03	2.35	3.92	3.62	3.76	1.46	9.02	40.53
*1888	2.55	1.40	1.89	1.77	7.08	.....	.....	.....	.....	.....	.....	.....	.....
1892	2.22	1.69	2.24	3.27	8.93	7.61	3.84	1.94	2.56	1.07	1.67	2.52	39.56
1893	2.07	1.94	2.83	4.02	2.99	4.42	3.74	.39	3.22	1.05	2.13	1.69	30.49
1894	2.15	1.97	3.12	2.04	4.28	1.91	.15	†.92	3.20	.99	1.42	.53	22.68
1895	1.22	.43	.83	1.17	4.46	1.62	4.59	2.83	1.81	.82	2.50	2.00	24.28
1896	.65	.74	.81	3.62	5.87	3.18	4.81	3.75	4.66	.89	1.70	.44	31.12
1897	3.00	1.25	4.25	3.43	.96	5.27	1.97	.56	2.00	.48	1.90	1.17	26.24
1898	3.27	2.26	4.74	3.29	4.00	2.49	1.55	6.39	3.01	2.56	1.19	.78	35.53
1899	.30	1.25	1.67	1.56	6.76	1.91	2.82	1.83	1.48	3.48	.56	1.81	25.43
1900	2.06	1.86	2.86	1.32	5.25	1.32	4.36	6.18	4.39	3.41	2.10	.34	35.45
1901	1.09	.54	2.98	.34	2.28	2.48	8.98	.53	2.36	.90	1.00	1.13	24.61
1902	.43	1.05	1.81	1.69	8.00	9.75	8.47	2.62	4.63	3.90	2.37	2.13	46.85
1903	2.76	.90	3.07	4.20	4.35	1.46	4.91	5.64	6.13	3.21	.73	1.16	38.52
1904	2.23	.79	3.07	2.29	3.26	2.27	7.58	3.45	5.46	.86	.03	2.17	33.46
1905	.32	1.24	3.35	3.66	6.15	3.35	1.97	4.15	1.23	3.15	1.83	1.12	31.52
1906	2.07	2.46	2.70	2.70	7.24	6.33	5.12	2.09	4.70	1.84	2.19	1.52	40.96
1907	3.43	.22	2.08	2.11	4.89	3.19	8.76	5.33	4.95	1.71	1.23	.59	38.49

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

DIXON, LEE COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Aeb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1908	.72	2.82	3.38	3.29	5.16	2.24	4.18	5.68	.84	.90	2.45	.84	32.50
1909	2.78	1.89	1.16	6.40	4.34	5.72	1.51	1.13	2.81	2.42	2.59	.....	.....
1910	.....	.65	.20	3.43	4.22	.45	.70	3.14	4.76	.54	.85	.89	.....
1911	.73	3.52	.67	3.73	2.69	3.64	3.38	6.62	6.77	2.08	5.47	1.47	40.77
Means	2.02	1.67	2.50	2.78	4.87	3.46	3.92	3.20	3.53	1.90	1.76	1.65	33.63

† Estimated.
* Values prior to 1892, from Prairieville, seven miles distant.

DUBOIS, WASHINGTON COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1864	3.50	1.25	.75	7.00	2.15	1.00	3.00	3.00	1.50	1.75	5.00	3.50	33.40
1865	1.25	5.25	6.00	7.50	4.00	3.50	6.00	3.75	5.00	3.45	.35	5.75	51.80
1866	2.30	1.30	4.05	1.80	2.25	8.50	3.65	1.30	10.15	3.35	3.70	3.05	45.40
1867	2.90	6.27	3.53	1.15	5.90	5.18	5.55	2.60	.12	1.20	2.30	3.45	40.15
1868	2.15	.50	8.43	4.75	8.20	3.23	2.70	2.10	13.60	1.30	1.52	2.30	50.78
1869	1.47	3.75	4.71	4.89	3.06	4.30	4.42	3.57	2.75	1.35	4.60	2.11	40.98
1870	3.64	1.46	2.15	2.93	2.53	4.49	2.12	3.23	2.32	2.38	2.20	2.15	31.60
1871	3.15	4.60	2.75	1.22	3.76	2.14	1.09	2.60	.23	1.23	1.62	1.65	26.04
1872	1.35	2.23	2.65	3.80	4.96	3.50	4.22	.93	1.90	.50	1.02	1.67	28.73
1873	5.34	3.60	2.50	5.10	4.05	6.42	9.17	1.22	4.02	2.42	1.20	7.82	52.86
1874	2.95	4.77	6.56	4.20	.....	3.06	5.15	5.35	1.50	1.40	3.52	3.00	.....
1875	.81	3.87	5.07	2.40	5.95	10.77	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1893	.....	.....	.....	.....	.....	.....	.28	.45	3.73	2.22	3.24	.....	.....
Means	2.57	3.24	4.10	3.90	4.26	4.67	3.95	2.51	3.90	1.88	2.52	3.31	40.17

DUBUQUE, DUBUQUE COUNTY, IOWA

Elevation, 639 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1873	.....	.....	.....	.....	.....	.....	1.27	5.88	1.53	2.07	0.77	2.07	.....
1874	2.45	0.49	1.28	1.54	1.08	3.29	3.24	2.13	7.68	2.18	4.79	.65	30.80
1875	1.00	2.12	1.45	2.71	3.62	4.75	5.74	1.07	7.10	2.71	.48	2.71	35.46
1876	3.20	1.53	4.00	3.63	5.96	7.88	8.15	5.92	5.90	1.10	2.49	.52	50.28
1877	.96	.26	4.53	3.74	3.84	6.75	2.90	3.96	.67	5.35	3.31	2.70	38.97
1878	.49	1.93	2.44	4.34	4.61	4.35	6.71	1.72	6.94	2.85	.80	1.12	38.30
1879	.44	1.00	1.20	2.02	2.94	4.99	6.78	2.43	2.98	.93	5.41	1.28	32.40
1880	1.95	1.01	2.55	3.51	3.72	6.02	3.55	7.15	6.84	.66	2.11	1.25	40.32
1881	1.87	3.75	3.78	1.30	2.20	7.56	10.53	2.46	10.26	6.70	3.19	1.55	55.15
1882	.84	.59	1.49	4.47	4.16	6.29	1.48	2.29	2.60	5.29	1.55	1.79	32.84
1883	1.59	2.60	.32	1.93	7.13	5.34	7.90	2.70	2.09	4.44	1.65	1.88	39.57
1884	.99	2.19	3.85	2.77	4.88	4.89	5.30	4.25	4.07	4.16	1.43	4.08	42.86
1885	1.80	.72	.41	3.69	2.62	6.16	6.35	8.02	4.58	2.32	.64	3.14	40.45
1886	3.17	1.36	4.32	2.12	4.17	.71	.89	.67	3.10	4.08	1.89	1.03	27.51
1887	3.33	3.56	1.80	1.37	2.53	1.32	2.44	4.40	7.62	2.22	.74	3.07	34.40
1888	1.20	1.31	3.44	2.58	5.84	5.28	3.59	1.73	2.01	1.62	2.75	1.96	33.31
1889	1.55	1.34	.30	3.56	4.00	3.87	4.22	.26	1.54	.66	1.57	1.38	24.25
1890	2.31	1.25	1.68	2.94	5.36	9.59	1.21	6.00	3.72	6.43	1.85	.82	43.16
1891	1.27	.98	2.69	1.63	2.54	2.34	4.59	3.31	.68	2.20	3.24	2.08	27.55
1892	2.34	1.02	1.91	4.37	9.18	14.16	5.08	2.51	3.79	.44	1.89	2.08	48.77
1893	1.60	1.30	2.52	4.32	3.06	5.49	3.57	.58	3.31	1.66	2.03	1.33	30.77
1894	1.11	1.22	3.06	2.27	1.75	2.25	.02	1.32	2.96	1.51	1.53	.35	19.35
1895	1.44	.66	.99	.49	2.63	1.05	3.00	1.75	2.06	.80	2.12	2.75	19.74
1896	.75	1.93	.76	7.80	7.63	3.11	7.72	2.05	5.67	2.56	1.60	.71	42.29
1897	2.55	1.43	2.97	3.39	2.09	2.36	4.34	1.51	3.19	1.02	1.23	2.08	28.16
1898	2.19	2.01	2.78	4.06	4.47	4.36	2.83	4.37	3.07	3.86	1.15	.33	35.48

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

DUBUQUE, DUBUQUE COUNTY, IOWA—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1899	.51	.67	1.52	4.24	5.75	4.08	4.12	1.95	.99	1.63	.97	1.85	28.28
1900	1.15	2.13	1.84	2.39	4.75	2.04	8.00	3.35	3.34	2.38	1.64	.42	33.43
1901	1.07	1.07	2.88	1.01	3.10	1.23	2.31	.25	3.72	1.64	.67	1.44	20.39
1902	.74	1.43	1.76	1.11	8.67	6.97	6.80	1.57	3.93	2.26	.88	2.24	38.34
1903	.17	1.19	1.84	3.29	4.25	2.16	7.10	5.27	3.20	1.72	.75	.85	31.79
1904	.51	.73	2.86	2.05	3.86	.74	1.86	2.58	2.21	3.18	.08	2.37	23.08
1905	.95	1.58	2.27	3.07	4.06	4.33	1.51	3.07	1.25	3.88	2.64	1.17	29.78
1906	2.72	.93	2.36	1.16	3.59	3.36	1.57	4.44	1.78	1.70	2.95	2.04	28.60
1907	1.72	.52	.99	2.48	2.66	4.08	5.15	5.85	6.01	.77	1.29	.67	32.19
1908	.70	1.87	1.72	2.50	5.82	2.21	2.06	2.92	1.14	1.20	1.34	.63	24.11
1909	1.98	1.32	1.25	7.40	2.32	6.61	1.30	1.50	4.28	2.03	2.94	2.08	35.01
1910	2.45	.50	.14	3.40	3.42	2.43	.47	3.96	3.10	.89	.53	.57	21.86
1911	.72	4.09	.52	3.17	2.84	2.83	4.41	8.74	3.56	2.34	3.04	1.95	38.21
Means	1.52	1.46	2.07	2.99	4.13	4.40	4.10	3.24	3.71	2.44	1.85	1.61	33.61

DUQUOIN, PERRY COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1887	.....	.....	4.11	.....	3.29	.....	2.40	0.21	2.47	.....	.....	.....	.....
1888	3.20	2.20	3.50	2.00	3.70	8.10	2.20	6.00	.70	2.60	4.60	2.50	40.80
1889	2.85	2.25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1895	.....	.20	3.02	1.99	2.25	2.63	5.26	2.20	1.45	.89	5.57	5.69	.....
1896	1.51	2.49	3.30	2.38	8.80	3.45	5.23	.99	.....	.....	.....	.....	.....
1897	3.05	2.58	10.70	5.69	2.45	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1909	5.80	4.63	4.90	5.43	3.86	1.34	8.72	.17	5.71	.84	3.13	3.71	48.24
1910	1.43	4.16	.08	3.23	2.99	3.41	3.68	2.59	2.41	7.17	.31	2.01	33.47
1911	.89	4.02	1.38	8.52	1.86	1.87	1.91	3.55	10.26	3.02	2.68	2.30	42.26
Means	2.68	2.82	3.87	4.18	3.65	3.47	4.20	2.24	3.83	2.90	3.26	3.24	41.19

DURAND, WINNEBAGO COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1878	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.26	1.15	0.35	.....
1879	0.15	2.60	0.95	2.20	4.17	3.82	6.88	2.71	.....	1.65	4.18	1.05	.....
1880	1.50	2.40	2.60	5.55	3.51	5.49	4.32	8.11	8.44	.76	1.31	.90	44.89
1881	.....	3.90	2.60	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	0.82	2.97	2.05	3.88	3.84	4.66	5.60	5.41	8.44	1.89	2.21	0.77	44.89

DWIGHT, LIVINGSTON COUNTY, ILLINOIS

Elevation, 657 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1887	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.89	3.58	.....
1888	1.03	1.43	3.10	1.42	4.46	2.10	2.44	2.27	0.40	3.26	2.53	2.53	.....
1889	1.47	2.82	2.23	2.12	4.24	6.34	6.12	.89	2.92	1.79	3.10	1.79	35.83
1890	4.59	1.45	3.37	3.95	5.08	7.38	.90	2.05	1.30	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1896	.....	.....	.....	.....	.....	3.13	4.61	2.61	5.09	.64	3.54	.11	.....
1897	5.34	1.46	3.57	2.74	1.81	5.25	2.50	1.60	.81	.44	4.77	1.59	31.88

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

DWIGHT, LIVINGSTON COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1898	3.80	2.07	6.64	2.95	6.12	3.79	.29	3.35	4.86	4.42	2.50	1.26	42.05
1899	.80	2.13	1.76	.70	*2.08	5.07	4.73	2.29	2.57	2.81	2.03	2.06	28.53
1900	1.76	4.50	2.87	1.09	3.72	2.99	4.49	5.03	1.99	1.69	3.35	.42	33.90
1901	1.60	1.03	3.17	.50	1.93	3.71	2.00	1.67	2.05	1.44	1.14	2.55	22.78
1902	.44	1.43	3.82	2.10	5.72	11.53	7.52	3.62	5.36	2.09	3.11	1.49	48.23
1903	1.55	3.17	2.50	5.14	3.24	2.37	.....	.....	.....	.....	.....	.....	.....
1906	2.99	1.76	2.15	2.06	2.07	2.49	4.84	1.85	3.80	1.54	2.80	2.64	30.99
1907	5.38	.14	2.22	2.56	3.13	2.88	8.35	7.30	6.34	.45	2.02	3.01	44.28
1908	1.06	3.41	3.27	3.89	6.79	.97	2.61	1.09	1.22	.61	2.03	1.14	28.09
1909	1.73	4.29	1.79	7.13	2.48	6.06	1.50	3.53	2.34	2.38	4.24	2.96	40.43
1910	2.37	1.05	.52	3.84	5.11	3.00	1.36	4.66	5.73	1.44	.26	1.24	30.58
1911	1.91	1.84	2.10	4.58	2.79	1.78	1.18	2.08	6.67	4.30	2.57	2.27	34.07
Means	2.37	2.12	2.82	2.92	3.80	4.17	3.50	2.87	3.34	1.92	2.62	1.92	34.74

* Ten days missing.

EAST PEORIA, TAZEWELL COUNTY, ILLINOIS

Elevation, 470 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1890	3.12	1.57	3.13	2.19	2.99	2.45	1.53	2.29	2.03	2.42	2.14	0.47	26.33
1891	2.16	2.25	3.60	3.80	1.93	5.72	4.46	8.47	1.32	.71	4.32	2.96	41.70
1892	.96	4.31	1.79	6.81	8.52	5.37	3.38	1.54	2.61	1.20	*2.72	1.08	40.29
1893	1.47	4.50	3.38	8.51	4.01	4.29	1.56	.53	3.53	.27	2.39	2.32	36.76
1894	2.44	1.06	2.91	2.04	2.80	3.24	2.53	.51	5.38	.31	2.26	2.15	27.63
1895	1.68	.10	1.11	2.45	1.13	1.31	8.15	2.38	6.19	.91	4.10	4.66	34.07
1896	.75	1.80	1.26	3.74	4.77	3.47	7.97	2.84	4.09	.34	3.18	.27	34.48
1897	3.47	1.25	3.71	3.19	1.45	1.93	4.71	2.58	1.15	.09	2.57	1.43	27.53
1898	4.61	2.16	6.90	2.80	7.39	3.71	.....	.....	.....	.....	.....	.....	.....
Means	2.30	2.11	3.09	3.95	3.89	3.50	4.29	2.64	3.29	0.77	2.96	1.92	33.60

* For Peoria.

EAST ST. LOUIS, ST. CLAIR COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1910	.....	.....	0.17	3.61	4.29	4.14	5.00	1.72	6.49	3.24	0.25	1.24	.....
1911	0.61	2.91	2.40	6.71	2.61	1.99	.62	3.62	7.16	2.99	3.27	1.21	36.10
Means	0.61	2.91	1.28	5.16	3.45	3.06	2.81	2.67	6.82	3.12	1.76	1.22	36.10

EBERLE, EFFINGHAM COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1886	.....	2.06	8.30	.....	5.12	7.15	.....	2.83	6.16	.....	5.24	1.56	.....
1887	.....	.....	.....	4.30	.....	1.11	.....	.....	1.62	0.45	.....	.....	.....
1888	2.50	.....	3.32	.....	3.95	.....	4.49	.....	.....	.....	4.82	.....	.....
Means	2.50	2.06	5.81	4.30	4.54	4.13	2.24	2.83	3.89	0.45	5.03	1.56	.....

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

EDWARDSVILLE, MADDISON COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1910	3.14	2.89	0.13	3.71	5.56	4.45	5.06	2.42	7.05	4.42	0.12	1.00	39.95
1911	1.33	2.27	2.31	6.58	.98	1.52	1.73	2.68	10.71	2.80	2.17	1.77	36.85
Means	2.24	2.58	1.22	5.14	3.27	2.98	3.40	2.55	8.88	3.61	1.14	1.38	38.40

EFFINGHAM, EFFINGHAM COUNTY, ILLINOIS

Elevation, 690 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1869	.....	.....	.....	.....	5.66	8.76	4.50	2.75	.....	.....	.....	.....	.....
1870	5.80	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1892	.....	.....	.....	.....	.....	.....	.....	.....	0.49	0.76	2.98	1.20	.....
1893	1.10	3.02	4.27	.....	5.50	.....	*.60	1.70	.....	1.20	.....	2.25	.....
1894	1.50	.30	3.40	3.27	.....	.....	.....	2.72	4.39	.70	1.45	1.05	.....
1895	1.05	.90	1.65	2.95	.....	2.40	1.70	.....	1.10	.....	2.50	5.70	.....
1896	.....	§1.65	†2.20	‡2.40	.....	4.60	5.40	1.45	3.80	.....	3.38	.52	.....
1897	4.70	2.73	7.54	5.68	2.63	5.19	2.11	.56	.25	.42	4.76	3.14	39.71
1898	4.57	1.65	12.77	4.86	3.94	6.98	3.17	3.87	5.26	4.13	2.30	1.84	55.35
1899	3.03	2.47	2.97	1.32	5.49	2.30	2.43	2.35	.58	3.90	2.37	3.38	32.59
1900	.55	3.97	1.90	.89	3.41	9.48	4.08	1.58	4.34	2.94	3.27	1.67	38.08
1901	1.38	2.16	3.32	2.16	1.29	3.97	1.32	1.09	.40	1.20	1.80	3.00	23.09
1902	.87	.40	1.30	3.45	4.02	6.71	2.61	4.98	3.44	2.03	2.81	3.40	36.02
1903	2.10	3.55	3.50	2.28	.68	4.57	.....	.....	.....	.....	.....	.....	.....
1904	.....	.....	7.92	1.20	5.25	3.21	5.50	.....	3.98	.27	.26	2.28	.....
1905	2.10	2.09	2.67	3.62	3.77	2.59	3.89	2.89	.....	.....	.....	.....	.....
Means	2.40	2.07	4.26	2.84	3.78	5.06	3.11	2.36	2.55	1.76	2.53	2.45	37.47

* Five days missing.
§ Three days missing.
† Seven days missing.
‡ Nine days missing.

ELGIN, KANE COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1858	.....	1.80	3.08	3.95	8.00	4.08	6.42	3.31	4.20	2.94	4.29	1.73	.....
1859	1.80	1.01	6.14	2.89	4.86	1.49	1.54	.92	2.84	.67	3.73	.90	28.79
1860	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1861	1.50	3.56	2.67	5.14	3.28	3.71	.....	4.14	7.51	2.22	1.45	1.37	.....
1862	.....	.....	.....	.....	.....	.....	2.40	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1878	.....	.....	.....	.....	3.19	3.09	3.22	4.03	1.59	3.31	1.46	.40	.....
1879	1.49	.52	1.45	2.14	5.84	3.20	6.63	2.42	1.02	1.80	4.23	1.59	32.33
1880	3.55	3.43	2.36	4.19	6.43	5.40	4.39	3.51	4.25	2.09	1.24	.55	41.39
1881	.....	2.66	.70	1.19	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1898	*3.85	2.44	5.08	1.40	4.24	8.23	.75	6.43	4.40	4.76	2.22	1.25	45.05
1899	.57	1.60	2.72	.68	5.20	1.89	4.31	1.89	2.28	2.39	1.38	1.69	26.60
1900	1.77	3.41	1.58	1.34	2.08	2.72	4.55	5.75	2.35	2.80	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1906	.....	.....	.....	.....	.....	.....	.....	.....	5.78	1.99	3.29	1.37	.....
1907	4.49	.72	2.57	2.21	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1910	.....	.....	.....	.....	.....	.....	3.14	2.87	2.97	1.21	1.15	.83	.....
1911	1.26	2.81	.31	4.29	1.24	1.79	1.86	4.60	5.66	2.55	2.46	1.54	30.37
Means	2.25	2.18	2.61	2.67	4.44	3.56	3.56	3.62	3.74	2.39	2.45	1.20	34.09

* Partly interpolated.

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

ELLSWORTH, M'LEAN COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1892	0.70	2.75	2.33	7.50	7.60	6.80	3.20	4.30	3.00	0.80	2.40	1.30	42.68
1893	1.40	3.80	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	1.05	3.28	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

EQUALITY, GALLATIN COUNTY, ILLINOIS

Elevation, 421 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1895	.....	.....	.....	.....	.....	.....	.....	.....	2.12	0.33	7.37	3.40	.....
1896	1.35	1.23	3.13	1.79	7.12	5.82	5.54	1.95	4.27	1.87	3.86	.67	38.10
1897	4.05	2.93	9.59	6.88	3.26	6.12	*2.00	1.49	.79	1.07	7.22	2.91	48.31
1898	4.62	†1.35	9.29	4.50	6.07	2.40	3.60	1.14	4.32	3.45	1.10	1.03	43.75
1899	5.79	3.12	5.35	3.09	3.86	3.53	10.04	1.80	3.14	4.25	2.32	2.83	49.12
1900	2.41	4.22	2.43	1.87	3.89	9.93	2.07	1.15	2.81	1.50	4.07	2.12	38.47
1901	.65	1.76	3.26	3.06	1.65	3.02	2.11	3.39	.85	4.74	1.54	3.53	29.56
1902	2.55	1.03	3.09	3.09	2.71	1.84	1.69	3.39	3.74	1.06	4.91	5.17	34.27
1903	2.67	4.44	7.27	3.53	2.60	2.40	1.83	1.62	.60	2.17	1.29	2.74	33.16
1904	4.39	3.49	7.80	4.09	3.33	3.95	3.69	2.70	8.85	2.05	.39	2.66	47.39
1905	2.77	1.70	3.05	3.38	4.91	2.21	9.40	3.78	1.88	7.72	2.82	3.30	46.92
1906	7.60	1.99	6.88	2.16	1.48	2.88	3.93	6.33	5.06	1.56	7.75	7.52	55.14
1907	10.90	1.35	4.13	3.25	6.47	5.53	1.96	8.07	1.67	3.88	4.96	3.73	55.90
1908	2.85	6.58	5.21	5.85	6.20	2.45	4.34	3.81	.44	.05	2.69	1.30	41.77
1909	3.48	6.14	3.98	6.29	3.08	2.56	8.19	.46	2.55	1.98	3.83	3.86	46.40
1910	2.37	3.80	T	5.30	2.70	2.84	9.26	3.94	3.51	13.17	.24	3.05	50.18
1911	1.53	2.23	2.03	10.30	1.19	1.51	2.43	6.97	5.07	2.58	3.06	3.61	42.51
Means	3.75	2.96	4.78	4.28	3.78	3.68	4.51	3.25	3.03	3.15	3.46	3.14	44.88

* Estimated.
† Interpolated from surrounding stations.
NOTE—Values from 1895-97, inclusive, are for Iron, in same county.

EVANSTON, COOK COUNTY, ILLINOIS

Elevation, 644 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1858	.....	2.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1859	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1860	0.60	.57	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1864	.....	.....	.....	2.05	1.44	0.30	3.42	0.83	.....	.....	.....	0.66	.....
1865	.....	2.63	2.00	2.69	1.75	3.71	3.34	5.84	3.32	2.45	0.32	.42	.....
1866	1.40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1869	.93	2.94	2.07	3.62	6.58	9.96	3.15	3.94	.64	.72	4.49	2.99	42.03
1870	3.25	1.25	3.24	1.20	1.21	1.37	4.26	2.28	3.34	4.39	1.58	2.15	29.52
1871	2.90	1.96	2.43	2.62	2.73	4.06	2.33	3.41	.66	2.66	2.96	1.30	30.02
1872	.20	.20	.....	.....	2.01	4.64	3.57	1.99	5.39	.65	.82	1.55	.....
1873	2.16	.45	2.21	3.59	6.31	.12	.....	.....	1.75	1.52	.....	.....	.....
1874	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1875	.....	.....	.....	.....	.....	.....	.....	.....	4.01	3.30	.46	2.64	.....
1876	3.08	3.86	2.78	2.68	3.00	4.94	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1885	.....	2.55	.48	3.32	2.48	4.83	2.87	.....	4.04	3.51	1.87	2.24	.....
1886	3.33	2.25	2.28	2.16	3.05	1.30	1.61	3.58	3.79	1.46	.96	1.94	27.71
1887	4.05	4.86	1.66	.52	2.12	1.80	1.34	2.67	3.55	2.00	2.07	3.45	30.09

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

EVANSTON, COOK COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1888	1.40	.....	.....	2.34	4.88	1.78	3.24	4.14	1.54	2.10	.....	.68	22.10
1889	1.57	1.03	1.48	1.75	4.02	4.45	4.42	.88	2.42	1.72	2.30	2.08	28.07
1890	1.71	.....	2.96	2.68	4.38	5.94	2.31	2.70	1.49	5.00	1.70	.73	31.60
1891	2.52	2.93	1.71	4.40	3.12	3.98	.....	.....	.....	.....	.....	.....	.....
Means	2.08	2.11	2.11	2.54	3.27	3.55	2.99	2.93	2.76	2.42	1.77	1.75	30.14

NOTE—Values from 1885–91, inclusive, are for South Evanston

EWING, FRANKLIN COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1886	3.61	1.14	3.97	3.03	5.01	5.20	.....	3.64	1.81	.69	6.56	2.40	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1911	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.06	2.08	.....
Means	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.81	2.24	.....

FAIRFIELD, WAYNE COUNTY, ILLINOIS

Elevation, 495 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1885	.....	1.37	0.35	2.17	3.36	4.20	1.70	2.00	7.16	2.24	2.55	3.00	.....
1886	2.87	1.65	2.45	3.28	2.55	4.20	.65	2.57	2.86	.24	6.50	2.58	32.40
1887	2.06	3.96	5.93	4.63	5.33	1.73	2.49	.40	3.85	.70	4.87	3.96	39.91
1888	3.70	2.00	3.49	1.04	2.18	.12	1.93	5.91	.44	1.08	1.99	4.01	27.89
1889	2.65	1.25	2.21	*1.10	4.40	5.75	4.72	1.75	5.49	*2.00	*5.30	*2.00	38.62
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1895	.....	.....	.....	.....	.....	.....	4.51	1.78	2.86	.....	3.97	3.64	.....
1896	1.15	1.69	2.88	1.24	6.81	8.29	6.00	1.36	6.64	2.43	3.98	.43	42.90
1897	3.82	3.70	12.00	5.51	2.18	4.47	6.93	.43	.87	.66	6.46	3.90	50.93
1898	5.06	1.20	11.99	5.01	6.69	5.05	5.05	4.91	4.35	3.30	2.39	1.64	56.64
1899	3.54	2.55	2.76	1.68	3.91	2.65	5.08	2.48	.77	5.26	1.72	2.14	34.55
1900	.93	2.94	2.18	1.17	4.24	9.07	3.82	1.75	3.94	1.63	3.45	1.64	36.76
1901	1.02	1.91	3.64	2.83	1.82	1.81	1.58	2.61	1.84	3.09	1.31	4.84	28.31
1902	1.48	1.00	3.65	1.78	2.97	4.55	1.83	3.29	1.55	.76	3.18	4.11	30.15
1903	1.68	3.19	3.34	3.54	3.37	2.07	4.41	7.12	1.34	2.14	.81	2.67	35.68
1904	3.04	2.15	9.72	2.86	3.90	2.78	4.90	6.83	6.04	.34	.70	2.63	45.89
1905	1.99	1.27	2.75	3.98	2.87	3.89	5.06	3.99	2.31	6.93	1.84	3.40	40.28
1906	3.99	1.90	3.39	2.28	.70	3.45	2.45	3.68	5.43	2.95	4.50	4.14	38.86
1907	7.39	.30	3.34	3.33	5.40	5.74	4.76	5.58	1.03	2.32	3.61	2.96	45.76
1908	†2.56	†6.55	†4.99	5.30	8.02	1.21	2.59	2.61	.35	.....	3.21	1.02	38.41
1909	3.02	6.83	3.91	6.18	3.17	3.95	5.35	1.05	4.10	1.86	3.60	2.34	45.36
1910	2.40	3.87	.08	3.20	3.77	1.14	5.20	1.54	6.35	7.45	.96	1.91	37.87
1911	1.40	2.19	2.00	6.21	1.20	3.89	.84	2.53	6.80	2.01	2.64	2.91	34.62
Means	2.79	2.54	4.22	3.25	3.75	3.81	3.72	3.00	3.35	2.25	3.16	2.82	39.09

† For Albion, sixteen miles from Fairfield.
* Interpolated from surrounding stations.
Values 1885–1889, inclusive, and April 1908–1911, are for Fairfield.
Values 1895–1907, inclusive, are for Cisne. Cisne is fourteen miles from Fairfield.

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

FAIRMOUNT, COOK COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1892	1.65	2.60	1.70	7.41	6.71	3.36	4.77	3.10	0.50	0.10	3.62	1.50	37.02
1893	1.50	.85	4.25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	1.58	1.72	2.98	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

FAIRVIEW, FULTON COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1886	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.78	.....
1887	1.43	6.12	0.38	2.06	3.30	1.28	2.18	3.88	.....	2.30	.....	.....	.....
1888	1.71	1.25	4.04	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	1.57	3.68	2.21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

FLORA, CLAY COUNTY, ILLINOIS

Elevation, 495 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1869	*1.80	*2.10	*3.80	10.90	5.10	6.40	6.10	2.70	4.30	3.00	5.70	3.80	*55.70
1870	4.90	1.30	3.30	2.50	3.00	4.30	6.30	5.10	1.30	3.50	1.80	2.60	39.90
1871	3.30	5.20	3.50	.90	5.90	2.60	3.50	2.35	1.90	2.50	2.57	2.35	36.57
1872	1.05	1.70	1.90	4.20	4.70	3.10	9.50	2.70	1.70	1.00	.50	1.70	33.75
1873	3.70	2.60	4.31	4.30	5.20	3.00	6.40	2.30	3.60	3.10	1.40	9.59	49.40
1874	3.20	4.60	6.30	6.10	3.60	3.40	6.20	9.80	1.50	2.20	3.80	4.30	55.00
1875	1.30	4.40	4.50	1.40	8.30	*9.00	15.30	2.90	3.50	1.80	2.70	2.60	*57.70
1876	9.80	3.40	5.90	4.10	9.80	6.40	6.50	4.00	2.60	1.80	3.00	.30	62.60
1877	1.70	1.20	3.15	4.60	6.40	11.40	2.40	4.50	1.60	4.60	3.60	3.00	43.15
1878	3.00	3.70	1.80	4.80	5.80	3.20	6.50	2.90	1.10	3.40	2.30	6.30	44.80
1879	5.10	1.40	5.10	2.60	2.10	1.20	2.30	5.50	1.00	2.90	5.00	3.20	37.40
1880	4.50	2.20	2.70	2.50	5.40	3.90	2.50	4.50	7.70	3.20	1.80	2.50	43.40
1881	.....	1.85	3.00	1.80	1.71	7.50	.....	.....	.....	.....	.....	.....	.....
1886	*4.41	1.02	3.79	4.55	1.25	7.57	1.89	4.69	3.52	.73	6.75	3.03	*43.20
1887	1.48	6.24	6.56	4.90	3.51	3.56	3.48	2.26	2.77	1.17	5.23	3.65	44.81
1888	2.39	2.72	5.22	1.62	3.32	4.83	1.79	7.66	1.26	2.35	6.16	1.97	41.29
1889	2.60	2.49	2.23	1.16	4.88	11.49	6.14	2.00	5.66	1.95	5.45	2.11	48.16
1890	8.31	4.15	6.45	4.80	2.70	3.72	3.14	3.05	4.90	1.38	2.20	2.50	47.29
1891	1.50	5.15	3.25	1.87	2.00	5.00	.20	6.10	1.40	1.80	6.60	2.20	37.07
1892	2.10	4.00	1.75	7.60	7.00	1.50	3.50	5.85	.50	.75	4.40	.75	39.70
1893	1.25	3.20	4.20	10.85	4.95	2.75	.65	1.20	*3.14	*2.02	2.90	1.33	*38.44
1894	2.41	2.43	2.97	3.20	3.77	1.91	2.96	1.75	4.09	1.60	.68	3.00	30.77
1895	3.46	.16	1.63	1.84	2.47	5.60	5.20	2.56	2.58	.46	4.34	3.77	34.07
1896	1.05	2.20	2.75	1.55	4.05	5.20	6.26	1.04	4.23	2.31	3.92	.31	34.69
1897	3.93	2.29	9.42	6.00	2.31	4.28	2.95	.39	.24	.37	5.48	2.95	40.61
1898	4.86	.....	.....	.....	.....	.....	.....	.....	4.76	4.06	2.41	1.52	*52.70
1899	2.94	2.69	3.48	1.49	2.73	4.56	3.53	2.57	.60	4.54	1.71	2.65	33.49
1900	.76	3.17	1.91	1.36	4.95	8.28	5.61	1.28	4.26	2.24	3.04	1.94	38.80
1901	.86	2.19	3.46	3.07	2.04	3.91	2.09	2.80	.84	2.95	1.82	5.18	31.21
1902	1.25	.94	2.64	2.35	1.55	4.63	2.53	3.13	3.37	1.01	2.85	†4.11	30.36
1903	2.04	2.02	3.57	4.79	1.75	2.18	3.89	5.62	2.51	1.81	.83	1.92	32.93
1904	2.37	2.00	9.50	2.45	3.40	5.14	3.41	3.02	6.26	.37	.86	2.15	40.93
1905	1.45	1.29	2.32	3.45	4.06	2.29	5.85	3.36	2.35	6.95	1.83	2.86	38.06
1906	†3.99	2.33	3.87	1.22	.69	2.52	2.17	4.76	6.78	2.29	5.71	3.33	38.66
1907	7.59	.63	3.09	3.63	4.02	6.08	4.44	4.98	.95	1.89	2.92	3.33	43.55

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

FLORA, CLAY COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1908	1.50	5.43	3.18	5.16	7.82	1.08	3.22	.90	1.06	.10	2.80	.98	33.23
1909	2.46	4.40	5.55	4.79	4.08	5.59	6.57	.09	5.79	4.50	4.28	2.45	50.55
1910	*2.71	3.66	.24	3.93	3.17	3.23	5.03	1.60	5.03	7.17	.78	1.27	*37.82
1911	.....	2.20	1.62	5.41	.....	.....	.....	3.92	9.82	2.81	2.91	1.87	.....
Means	3.12	2.75	3.78	3.78	4.05	4.66	4.33	3.40	3.18	2.44	3.24	2.77	41.69

* Values estimated from surrounding stations.
† For Cisne, eleven miles from Flora.
Values 1869–1881 and 1890 to January 1898, inclusive, are for Louisville, Illinois.
Values 1886–1889 and September 1898–1911, inclusive, are for Flora.
These stations are seven miles apart.

FORT MADISON, LEE COUNTY, IOWA

Elevation, 522 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1848	.....	.....	3.15	0.45	4.02	5.90	4.75	14.40	4.50	4.40	1.75	2.55	.....
1849	1.20	2.75	7.90	5.47	2.90	3.32	.75	10.90	7.80	3.30	7.15	.70	54.14
1850	2.93	.91	.85	5.20	4.70	4.90	6.55	9.15	6.95	2.55	3.43	2.24	50.36
1851	.63	1.70	1.66	3.45	10.80	8.60	5.95	2.95	1.90	2.70	3.02	1.96	45.32
1852	1.92	.15	8.15	3.33	6.85	4.97	2.60	3.10	6.55	6.40	6.40	1.80	52.22
1853	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1854	2.90	10.80	3.10	2.47	5.67	2.65	.77	1.04	6.17	4.40	1.34	4.95	46.26
1855	.....	.....	1.02	4.85	8.05	5.10	6.90	4.35	3.25	2.50	4.85	.....	.....
1856	2.50	1.52	4.30	4.36	3.85	.59	5.97	1.56	3.20	5.10	4.20	6.71	43.86
1857	.75	5.35	2.61	1.13	1.51	1.83	1.48	5.84	2.03	1.81	1.95	1.25	27.54
1858	1.72	2.28	1.84	6.85	8.10	6.36	5.90	1.59	3.11	5.93	4.64	2.78	51.10
1859	2.63	1.75	4.56	2.36	6.61	6.84	4.29	1.84	3.99	.80	1.40	.39	37.46
1860	3.30	2.05	.53	.68	1.75	6.80	3.68	2.46	5.26	.98	1.64	3.10	32.23
1861	1.10	2.10	2.64	4.91	2.41	3.88	1.39	2.10	4.25	2.84	1.05	2.34	31.01
1862	2.54	.75	2.22	5.45	2.35	4.87	4.81	3.72	5.30	1.54	2.40	1.61	37.56
1863	2.30	3.66	.91	1.78	1.35	1.08	1.71	5.57	3.99	3.52	.65	3.55	30.07
1864	1.21	.41	2.62	5.31	2.43	2.01	3.83	2.31	2.57	3.47	2.28	2.72	31.17
1865	.27	3.62	3.78	6.35	1.22	6.61	9.93	2.03	6.63	2.73	.28	1.11	44.56
1866	4.28	3.05	2.42	3.82	3.16	2.48	6.76	2.63	7.32	2.51	.84	2.58	41.85
1867	.90	3.08	3.37	3.25	5.88	4.11	2.59	2.44	1.73	1.30	1.72	1.15	31.52
1868	.51	.40	5.94	7.57	9.94	2.13	4.85	3.34	2.05	1.83	4.02	1.84	44.42
1869	1.21	2.45	1.68	3.46	4.73	4.61	7.05	5.91	2.76	2.00	3.31	2.39	41.56
1870	2.89	.30	4.47	.91	1.53	1.12	1.60	6.50	4.52	4.68	1.00	.72	30.24
1871	5.37	2.57	2.10	2.41	2.51	3.44	4.07	7.45	.50	4.36	3.20	1.29	39.27
1872	.29	.74	3.26	.....	.....	2.82	1.59	.66	1.98	2.40	2.80	1.80	.....
1873	.50	.....	3.70	4.60	3.48	1.20	3.25	1.70	2.67	2.05	1.26	.....	.....
1874	2.10	1.13	.52	.....	1.50	2.60	3.31	.85	6.75	.88	1.54	.30	.....
1875	.....	1.10	2.20	1.39	3.53	3.89	6.31	1.50	5.54	2.23	.45	2.53	.....
1876	2.92	1.00	4.62	3.26	3.31	3.23	5.47	2.22	7.06	1.80	1.82	.10	36.81
1877	1.05	.05	3.34	2.37	3.20	11.56	6.07	2.27	2.74	5.00	1.05	1.40	40.10
1878	5.00	1.35	2.23	1.41	3.85	7.08	2.66	4.40	1.70	2.18	.58	1.50	33.94
1879	.80	.65	1.62	1.12	4.27	4.44	1.85	1.74	1.30	.60	2.75	1.23	22.37
1880	2.95	1.60	2.10	4.03	4.75	2.14	2.50	5.10	1.85	1.70	1.20	1.20	31.12
1881	.90	2.95	3.50	1.60	.40	10.50	3.61	*1.88	2.98	6.96	2.53	1.40	39.21
1882	*1.00	.80	2.47	3.30	10.50	8.25	3.31	4.55	1.70	3.80	1.05	2.35	43.08
1883	1.75	3.50	1.05	3.10	7.10	8.55	7.90	1.73	.90	3.96	2.55	1.10	43.19
1884	.70	1.50	5.25	2.10	4.95	4.23	1.81	6.84	3.92	5.60	1.90	3.10	41.90
1885	2.20	*1.50	.00	3.27	1.53	4.93	2.40	3.50	4.13	3.15	.53	1.80	28.94
1886	2.50	1.35	*.75	1.40	4.80	.85	.30	6.60	3.45	3.40	.85	.95	27.20
1887	1.45	5.01	.75	.60	4.80	1.50	1.20	2.80	3.75	2.19	.93	3.16	28.14
1888	1.50	2.50	2.45	2.12	5.54	3.17	5.81	4.98	1.39	.83	1.43	2.18	33.90
1889	1.64	1.50	1.42	2.89	5.61	4.49	4.31	1.12	5.17	1.94	2.52	1.21	33.82
1890	2.49	1.83	3.67	1.39	3.14	6.38	2.30	2.37	2.07	4.13	1.84	2.50	34.11
1891	.86	1.35	2.25	2.59	1.86	5.72	3.25	5.20	1.19	1.76	2.36	1.73	30.12
1892	2.17	1.30	2.75	4.90	8.90	5.12	4.01	1.57	3.26	.85	2.69	2.11	39.63
1893	1.41	1.39	3.98	5.21	4.85	2.67	2.15	*1.88	4.88	.35	2.25	1.51	32.53
1894	2.05	1.05	.90	1.98	3.49	3.19	.38	.55	4.94	1.71	1.18	1.12	22.54
1895	.74	.47	1.20	3.22	2.23	2.79	5.51	3.15	3.97	.47	2.82	5.74	32.21
1896	1.25	1.56	1.52	3.57	6.29	2.48	7.62	2.60	7.43	1.51	.83	1.00	37.66
1897	6.16	1.70	2.93	4.13	1.94	4.28	5.91	1.18	1.12	.26	2.24	3.12	34.97

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

FORT MADISON, LEE COUNTY, IOWA—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1898	3.78	2.05	6.21	4.25	7.82	3.00	2.63	5.12	8.45	4.27	1.95	1.47	51.00
1899	.55	1.80	3.47	3.95	12.24	3.59	3.68	4.11	3.72	1.94	1.10	1.91	42.06
1900	2.00	4.50	1.72	2.13	3.93	2.88	3.15	3.82	3.97	4.19	3.08	.35	35.72
1901	1.30	1.04	3.75	2.51	8.11	4.91	2.19	.05	2.20	1.09	.79	1.42	24.36
1902	1.10	1.52	2.57	3.48	4.37	9.05	7.91	7.19	2.29	3.51	2.69	3.20	48.88
1903	1.46	1.03	2.25	4.81	2.88	3.49	1.70	5.09	6.37	2.75	1.34	.64	33.81
1904	3.15	.35	3.73	4.29	3.58	3.70	4.43	5.32	5.04	.52	.43	1.78	36.32
1905	1.37	2.13	.94	4.22	3.92	8.26	3.64	4.93	2.38	1.93	3.98	1.10	38.80
1906	2.79	2.29	3.85	2.11	2.26	3.52	2.16	2.66	4.58	.60	2.64	1.68	31.14
1907	4.02	.20	2.34	2.41	3.00	4.82	9.52	8.00	1.56	.32	.94	.77	37.90
1908	1.50	3.28	1.60	2.65	14.33	4.20	1.76	4.03	3.28	1.41	3.03	.95	42.02
1909	1.94	3.10	2.25	3.98	4.36	7.79	5.99	.18	4.24	3.51	4.28	2.20	43.82
1910	2.06	1.14	.75	3.19	6.32	2.31	2.72	2.65	2.39	.87	.70	1.04	26.14
1911	2.11	2.61	4.84	3.32	2.79	.67	4.82	2.60	13.21	1.71	3.08	.92	42.68
Means	1.98	1.96	2.73	3.25	4.57	3.91	3.96	3.68	3.93	2.57	2.17	1.89	37.29

* Taken from surrounding stations.

FORT SHERIDAN, LAKE COUNTY, ILLINOIS

Elevation, 693 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1889	.....	3.40	1.40	2.80	3.22	4.10	3.17	0.31	2.20	0.75	0.65	4.75	.....
1890	2.68	1.84	2.33	4.82	5.25	7.77	1.25	2.47	1.32	6.02	.92	2.27	38.94
1891	1.73	2.25	2.56	4.33	2.25	5.69	1.94	3.75	.48	1.55	4.09	.90	31.52
1892	.48	1.81	.95	3.57	6.51	10.91	2.54	.86	1.67	.00	1.78	2.60	33.68
1893	2.02	1.10	1.95	5.87	2.07	3.62	3.77	.10	3.62	1.19	2.87	1.61	29.79
1894	2.94	1.45	2.01	4.70	4.01	.51	T	.27	6.56	2.49	1.64	1.26	27.84
1895	2.61	.32	.45	2.50	3.70	2.60	3.30	3.81	4.88	.41	2.14	*6.76	33.48
1896	.56	1.06	2.53	3.13	2.35	1.95	3.86	1.79	5.60	.97	2.80	.65	27.25
1897	4.41	1.07	4.16	2.20	1.32	4.41	1.34	1.52	1.10	.25	3.53	1.51	26.82
1898	2.59	2.91	3.13	1.35	2.43	2.56	1.65	2.86	2.48	3.10	1.44	.91	27.41
1899	.52	1.27	2.47	.27	6.04	2.53	2.91	2.05	2.76	1.85	2.40	1.31	26.38
Means	1.71	1.68	2.18	3.23	3.56	4.24	2.34	1.71	2.97	1.69	2.20	2.23	30.31

* For Chicago.

FREDERICK, SCHUYLER COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1895	.....	.....	.....	2.65	1.65	2.70	5.25	5.35	2.90	.....	3.82	5.95	.....
1896	1.40	1.70	0.95	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

FRIEND GROVE, WABASH COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1895	.....	.....	.....	.....	.....	.....	.....	2.62	2.62	0.26	5.98	2.05	.....
1896	0.94	2.09	4.42	2.49	8.67	8.18	6.01	2.98	7.56	1.48	3.89	.50	49.21
1897	3.62	4.02	10.67	8.00	2.94	5.52	2.49	.42	1.10	.53	7.01	4.49	50.81
1898	6.35	1.86	11.38	5.46	6.15	4.28	6.28	3.38	3.54	3.68	2.58	1.83	56.77
1899	4.90	2.75	4.55	.95	3.58	5.21	4.31	2.03	1.01	4.54	1.91	2.83	38.57
1900	1.91	4.75	2.13	1.02	.40	8.42	4.56	1.03	3.79	1.90	4.55	2.02	40.48
1901	1.60	2.08	4.39	.....	.....	.....	.....	.....	.....	3.98	1.97	5.72	.....

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

FRIEND GROVE, WABASH COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1902	1.62	.59	3.41	2.45	2.91	4.48	2.38	2.83	2.76	1.57	4.43	5.13	34.56
1903	2.58	5.15	4.76	4.36	5.37	2.33	3.31	4.52	1.07	3.54	1.76	2.83	41.55
1904	4.42	2.63	12.63	2.97	2.15	3.42	4.61	4.03	6.91	.27	.73	3.42	48.19
1905	2.11	1.58	4.03	4.18	4.15	3.44	7.61	5.88	1.44	7.24	2.78	3.63	48.07
1906	6.19	2.06	5.09	1.64	1.19	3.80	1.70	4.89	5.64	2.30	5.97	5.13	45.60
1907	9.17	.60	5.01	3.48	4.69	4.42	2.48	6.97	.45	2.76	4.47	4.99	48.49
1908	2.24	6.97	4.25	6.30	6.94	.72	2.88	1.04	.....	.....	.....	.....	.....
Means	3.66	2.86	5.90	3.61	4.10	4.52	4.05	3.29	3.16	2.62	3.70	3.43	45.75

GALVA, HENRY COUNTY, ILLINOIS

Elevation, 842 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1862	.....	.....	.....	.....	6.12	3.62	3.12	7.31	6.75	.....	.....	.....	.....
1863	.....	.....	.....	.....	3.12	.06	.....	.....	.....	.....	.....	.....	.....
1864	.....	.....	.....	.....	.....	.....	.....	.....	2.31	1.94	2.37	2.93	.....
1865	3.00	2.95	2.31	4.44	2.56	2.87	4.31	5.25	7.50	2.25	.19	.40	38.08
1866	3.06	1.05	1.93	2.06	1.63	2.69	4.56	3.62	8.25	2.00	.35	3.22	34.42
1867	.75	1.75	1.95	2.27	6.41	1.62	1.77	2.82	.82	.87	1.99	1.25	24.27
1868	3.99	.83	5.73	3.15	7.04	2.10	1.25	3.38	2.61	.20	3.20	1.35	34.83
1869	1.17	2.86	1.64	2.07	5.86	12.43	3.73	7.01	.....	.35	.....	.....	.....
1870	.....	.....	.....	.....	.....	.38	.66	3.15	.....	.....	.....	.....	.....
1871	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1872	.....	.....	.....	.....	.....	.....	3.13	5.60	5.03	.70	1.15	2.20	.....
1873	2.15	.25	.43	5.53	5.11	1.60	3.12	1.15	2.18	1.76	1.08	.....	.....
1874	2.60	1.16	1.71	4.02	2.18	3.40	1.42	2.53	3.96	1.40	1.93	.64	26.95
1875	.14	.46	1.08	2.62	4.22	4.72	6.66	.70	2.16	1.24	.63	1.96	26.59
1876	1.69	2.14	3.56	2.62	5.28	4.67	4.26	.58	5.10	2.05	1.91	.58	34.44
1877	.....	.....	2.18	3.15	2.71	8.87	3.36	1.89	1.05	4.93	3.20	2.56	.....
1878	.24	1.03	2.40	4.87	4.43	3.18	2.16	6.34	1.02	3.20	.60	2.20	31.67
1879	.81	.75	1.31	2.16	.87	3.66	3.49	3.17	2.06	2.54	2.81	1.11	24.74
1880	3.28	2.30	3.18	3.54	5.23	3.26	2.31	2.52	1.74	1.73	1.83	1.24	32.16
1881	.92	3.89	3.41	1.53	1.84	8.36	3.94	.62	4.16	5.93	2.77	1.63	39.00
1882	1.51	1.06	2.93	2.93	4.96	6.23	3.94	6.56	.92	3.19	1.56	1.71	37.50
1883	1.87	2.75	.51	4.14	4.31	3.54	4.19	.....	.....	.....	.....	.....	.....
1893	.95	1.65	2.88	5.73	2.45	1.37	1.08	.69	3.57	.46	2.25	1.54	24.62
1894	1.64	.88	2.53	1.71	2.18	4.14	.99	1.78	5.17	1.16	1.62	.62	24.42
1895	1.33	.19	.35	1.03	2.53	1.57	5.58	2.74	5.17	.87	2.18	4.20	27.74
1896	1.17	.80	.79	4.24	5.25	3.10	8.45	3.69	6.68	1.30	1.42	.30	38.19
1897	4.91	1.23	4.64	2.61	1.06	.92	3.60	1.01	2.46	.23	2.00	1.08	25.75
1898	3.38	1.43	5.43	2.77	8.74	9.86	.96	7.13	3.84	2.73	2.19	.61	49.07
1899	.24	1.39	2.70	1.44	6.07	2.57	2.82	2.40	2.46	4.34	1.23	1.71	29.37
1900	1.71	2.49	2.95	1.35	4.28	.51	3.69	8.21	4.65	2.61	1.63	.16	34.24
1901	1.12	1.77	2.70	.05	1.51	3.70	4.59	1.38	2.84	1.17	1.08	1.09	23.91
1902	.44	1.29	4.17	2.07	5.01	8.96	10.54	3.78	6.04	3.28	1.82	1.64	49.04
1903	.74	1.95	2.72	4.07	5.42	3.64	5.77	4.91	5.30	1.88	1.08	.92	38.40
1904	2.18	.89	3.66	2.60	3.05	2.49	8.83	5.97	5.49	.24	.24	1.96	37.59
1905	.67	1.64	2.34	4.78	3.96	5.16	2.16	2.58	1.47	2.85	1.87	1.56	31.04
1906	3.01	2.19	2.24	1.92	2.33	3.49	2.10	2.50	4.02	.69	2.09	1.78	28.36
1907	3.24	.20	1.27	3.16	2.83	2.44	5.23	6.41	2.69	.65	1.43	1.11	30.66
1908	1.83	3.01	4.65	3.50	9.32	3.84	2.68	3.91	1.57	1.42	3.64	.48	39.85
1909	1.17	3.65	1.58	4.08	3.32	2.98	4.74	.90	2.85	2.60	5.39	3.64	36.90
1910	1.75	1.26	.33	2.52	5.55	1.53	2.24	.80	4.11	1.17	.32	.89	22.47
1911	1.71	2.75	1.27	3.57	1.62	2.81	3.99	2.44	8.29	2.05	2.76	2.39	35.65
Means	1.78	1.65	2.44	3.01	4.03	3.85	3.76	3.34	3.63	1.88	1.82	1.54	32.64

Values 1862-1883, inclusive, for Elmira, twelve miles distant.

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

GIBSON CITY, FORD COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1885	.....	.....	.....	.....	.....	.....	.....	2.25	3.60	5.50	1.95	3.20	.....
1886	1.70	2.60	2.90	2.50	4.45	4.00	2.50	1.50	5.30	.70	1.80	1.60	31.55
1887	1.40	4.10	.90	3.20	2.20	2.75	2.20	2.90	2.50	1.10	1.87	2.12	27.24
1888	2.75	1.25	1.88	2.12	7.12	5.25	.....	.....	.....	4.37	2.90	1.75	.....
1889	1.36	.....	.....	.88	.....	.....	.....	.....	.....	.38	2.62	1.75	.....
1890	6.00	1.00	2.80	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	2.64	2.24	2.12	2.18	4.59	4.00	2.35	2.22	3.80	2.41	2.23	2.08	29.40

GLENWOOD, COOK COUNTY ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Spet.	Oct.	Nov.	Dec.	Annual
1895	.....	.....	.....	.....	.....	.....	.....	2.45	1.37	0.74	2.76	5.75	.....
1896	0.94	1.38	0.43	2.84	4.44	3.41	5.96	3.01	5.67	.65	2.63	.14	31.50
1897	2.93	1.57	2.77	1.93	1.32	3.82	1.12	.54	.50	.45	4.17	1.62	22.74
1898	3.16	2.11	5.05	1.51	3.66	3.89	3.97	4.85	3.43	4.30	2.48	1.79	40.20
1899	.89	1.54	1.65	.20	7.58	.86	3.80	1.46	3.41	3.19	1.50	1.77	27.85
1900	1.38	2.72	1.71	.....	2.87	1.93	5.94	4.01	1.54	1.31	3.11	.17	.....
Means	1.86	1.86	2.32	1.62	3.98	3.78	4.20	2.72	2.65	1.77	2.78	1.88	30.57

GOLCONDA, POPE COUNTY, ILLINOIS

Elevation, 500 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1866	0.50	1.20	5.88	2.05	3.33	†4.00	3.32	1.67	7.83	0.87	3.20	3.48	†37.33
1867	1.90	6.20	4.50	.70	6.00	1.80	4.40	1.10	.60	.90	3.20	1.60	32.90
1868	2.20	.60	4.10	4.20	3.20	1.30	2.10	2.60	4.70	1.10	1.04	3.30	30.44
1869	1.40	1.20	9.40	4.20	2.20	4.00	2.00	1.00	.80	.60	1.10	2.76	30.66
1870	4.50	7.50	4.60	3.80	2.10	3.70	1.40	2.50	1.60	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1878	.....	.....	.....	.....	.....	.....	5.66	1.12	2.96	3.74	4.80	4.73	.....
1879	2.48	2.39	3.15	4.08	1.83	5.95	3.99	11.31	1.65	5.11	4.48	8.61	55.03
1880	5.67	5.51	4.27	3.74	7.50	3.57	6.07	2.65	4.53	6.71	4.37	1.67	56.26
1881	2.80	5.85	2.05	3.91	3.50	4.21	.61	.17	4.30	3.69	5.83	4.17	41.09
1882	6.05	10.19	4.72	3.85	10.24	4.00	5.90	11.58	3.83	2.81	5.64	2.43	71.24
1883	3.33	6.84	1.57	6.98	7.13	6.15	4.13	1.27	.71	6.67	8.66	3.66	57.10
1884	2.12	6.61	4.04	4.95	4.74	7.52	5.49	.49	5.02	3.46	2.07	8.15	54.66
1885	4.82	1.48	1.01	2.86	2.76	8.82	2.18	4.86	5.78	4.00	2.67	3.24	44.48
1886	3.05	3.01	3.19	4.42	4.05	3.81	1.35	3.89	2.69	.37	4.97	1.82	36.62
1887	2.14	5.32	2.39	2.89	2.00	2.66	1.11	1.71	5.19	.64	4.02	3.67	33.74
1888	3.75	1.14	6.59	2.36	2.99	7.00	1.65	4.48	.72	2.58	4.98	2.14	40.38
1889	4.54	1.15	1.58	.95	3.38	7.27	5.27	1.57	4.78	1.58	6.58	2.53	41.13
1890	7.35	7.74	9.21	4.79	4.70	2.17	.83	2.58	4.91	2.90	7.35	1.37	55.63
1891	4.58	3.50	6.62	1.64	3.05	4.84	1.85	6.33	.38	.75	7.94	3.84	45.32
1892	1.07	2.99	2.61	5.57	7.24	2.68	4.10	3.94	†3.00	2.05	3.88	1.58	†40.71
1893	2.04	4.11	2.43	8.82	4.92	3.78	3.04	2.50	2.62	4.63	3.32	2.45	44.66
1894	3.08	4.60	3.54	3.73	3.07	1.77	1.69	2.98	1.80	2.02	1.39	5.41	35.08
1895	3.79	.38	3.16	2.71	†1.56	†4.44	9.03	1.13	4.04	.77	7.20	3.46	41.67
1896	1.63	1.64	1.36	3.65	†10.00	†6.50 †	5.30	1.65	3.01	2.79	4.38	1.29	†43.20
1897	4.49	5.13	11.44	7.65	1.70	3.58	3.84	1.01	.20	1.29	4.23	3.38	47.94
1898	7.03	1.25	8.93	4.03	5.17	2.33	6.00	1.56	7.68	3.90	2.31	1.84	52.03
1899	6.78	2.97	6.12	3.39	6.20	3.32	4.19	3.47	2.33	3.62	2.14	5.27	49.80
1900	2.17	4.17	1.76	2.62	5.97	10.14	2.73	1.73	2.68	1.41	6.52	2.05	43.95
1901	1.66	1.54	4.10	3.98	1.51	.91	1.96	3.54	.70	5.45	1.94	4.33	32.39
1902	3.56	1.80	2.82	3.50	3.33	2.16	1.66	4.20	2.83	1.70	4.96	7.16	39.68
1903	2.63	5.22	5.90	2.65	3.34	1.60	2.76	2.35	1.94	2.83	1.81	3.71	36.74
1904	4.87	2.67	8.47	4.01	2.70	4.01	3.82	3.35	6.49	1.47	.32	3.58	45.76
1905	3.73	2.03	3.34	4.12	6.93	2.04	6.17	4.30	3.44	7.18	4.34	4.53	52.13

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

GOLCONDA, POPE COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1906	6.81	2.13	7.68	1.90	1.99	3.16	2.74	5.10	4.11	2.12	7.68	8.89	54.31
1907	8.90	2.05	4.04	3.84	7.07	4.82	3.70	6.38	2.09	2.68	4.78	4.12	54.47
1908	3.58	10.31	3.22	6.39	4.92	4.85	3.51	1.93	1.36	.11	4.16	1.54	45.88
1909	2.78	9.94	5.89	7.05	4.23	3.93	4.09	.08	5.15	1.39	4.58	5.23	54.34
1910	3.08	3.99	.30	6.40	3.58	3.67	10.75	3.58	1.69	15.46	1.50	3.52	57.52
1911	2.66	2.62	2.13	8.60	.99	2.92	4.52	5.40	4.75	2.38	4.00	4.30	45.27
Means	3.67	3.91	4.43	4.02	4.36	4.09	3.72	3.16	3.16	2.98	4.19	3.59	44.89

† Estimated.
Values from August 1, 1898–December 1907, inclusive, are for Raum.
All other values are for Golconda. These stations are seven miles apart.

GRAFTON, JERSEY COUNTY, ILLINOIS

Elevation, 422 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1872	0.89	2.13	5.83	3.90	5.20	8.20	11.60	4.40	2.20	0.30	1.50	3.40	49.55
1873	6.40	2.50	5.70	13.50	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.26	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1894	.....	.....	.....	2.33	2.03	1.94	1.35	2.15	3.75	1.89	1.90	3.04	.....
1895	.38	.38	1.58	1.30	2.59	2.96	7.51	1.92	2.78	.53	4.61	7.23	33.77
1896	1.45	2.47	1.69	2.80	6.46	7.03	5.09	1.93	3.37	1.16	1.02	.50	34.97
1897	2.87	2.01	6.97	6.51	1.17	4.99	3.73	1.24	.11	.07	3.81	2.72	36.20
1898	5.90	1.30	8.01	3.18	9.03	3.49	5.08	2.03	4.53	4.35	2.31	1.34	50.55
1899	1.12	2.52	3.73	2.91	8.02	2.58	2.27	3.31	1.46	4.75	2.17	2.36	37.20
1900	.76	4.52	2.05	2.08	6.67	2.54	4.04	2.46	4.64	1.78	2.29	.96	34.79
1901	1.78	1.95	2.46	1.44	.38	1.52	2.10	1.08	.45	1.86	1.68	3.88	20.58
1902	1.03	.96	3.95	2.67	1.41	8.48	1.30	3.58	3.74	1.91	2.43	4.48	35.94
1903	1.67	3.28	3.44	3.40	2.47	3.40	1.34	4.44	5.48	1.85	.53	1.64	32.94
1904	3.50	.43	6.17	5.16	3.33	5.99	5.34	4.58	4.18	1.35	.32	1.84	43.19
1905	1.40	.67	2.09	2.94	2.98	.49	5.09	4.21	4.46	8.17	1.54	2.19	36.23
1906	1.86	3.17	4.08	2.34	4.44	5.10	1.60	4.26	5.32	1.41	3.92	3.40	40.90
1907	5.52	1.42	2.38	3.14	2.62	5.54	6.74	3.83	.55	2.32	1.64	1.72	37.42
1908	2.04	3.86	2.78	6.75	4.20	2.86	5.46	.72	1.74	.54	2.08	1.44	34.47
1909	2.04	3.64	2.52	5.53	5.40	3.90	6.08	1.28	4.17	3.92	6.74	2.06	47.28
1910	3.48	3.88	.42	2.92	5.26	3.34	6.60	3.08	7.27	4.29	.68	1.70	42.92
1911	0.70	2.79	2.46	4.77	1.50	2.08	2.17	3.47	5.49	3.10	2.37	34.00	
Means	2.35	2.31	3.60	3.98	3.96	4.03	4.45	2.84	3.46	2.40	2.33	2.48	37.88

GRAND TOWER, JACKSON COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1885	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.31	.....
1886	1.87	1.27	3.14	2.63	2.66	2.46	0.84	2.33	2.88	1.07	5.47	2.69	29.31
1887	1.09	5.22	2.21	2.46	2.72	1.19	1.59	1.23	4.23	.86	3.47	2.55	28.82
1888	2.28	2.16	3.63	2.03	3.14	5.48	1.14	8.09	.80	1.97	4.60	2.78	38.10
1889	2.69	1.40	2.10	2.45	3.71	4.55	5.55	.55	5.45	1.45	4.55	3.40	37.85
1890	9.01	7.61	5.42	5.11	2.35	1.80	2.58	2.64	5.72	1.90	4.23	.22	48.59
1891	2.55	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	3.25	3.53	3.30	2.94	2.92	3.10	2.34	2.97	2.82	1.45	4.46	2.49	36.53

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

GRAYVILLE, WHITE COUNTY, ILLINOIS
Elevation, 393 feet .

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1879	.....	.....	.....	.....	.....	4.00	6.00	8.00	.....	.....	4.00	6.00	.....
1880	4.00	4.50	6.50	4.00	6.30	6.00	4.00	3.06	2.84	4.00	4.13	2.00	51.33
1881	2.99	4.97	4.60	6.00	2.00	6.00	.00	.50	4.50	3.50	4.50	4.15	43.71
1882	7.55	6.00	7.50	3.05	4.00	3.75	7.25	3.27	2.84	4.14	1.00	3.75	54.10
1883	2.50	.....	1.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1897	.....	.....	.....	.....	.....	.....	.....	.78	.65	.73	6.41	4.79	.....
1898	7.11	1.79	11.37	5.70	6.38	4.09	2.94	2.07	2.83	3.34	2.12	1.60	51.34
1899	4.37	2.91	5.47	.99	2.65	4.78	2.68	1.05	1.64	3.80	2.17	2.75	35.26
1900	1.78	5.03	2.05	1.40	3.96	7.55	3.71	*1.15	3.93	1.52	3.60	2.10	37.78
1901	1.82	2.03	.....	.....	.....	.....	.97	1.39	2.40	3.94	1.55	4.64	.....
Means	4.02	3.89	5.50	3.52	4.22	5.17	3.79	2.36	2.70	3.12	3.28	3.53	45.59

* Three days missing.

GREENVILLE, BOND COUNTY, ILLINOIS
Elevation, 635 feet

Year	Jan.	Fev.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1882	.....	.....	.....	.....	2.96	9.45	3.68	.....	.....	.....	.....	.....	.....
1883	1.00	4.50	3.66	5.05	6.25	4.21	7.50	3.52	0.03	9.52	6.62	2.46	54.32
1884	2.80	8.90	3.22	4.16	7.89	8.15	6.82	4.16	6.14	5.00	2.38	7.62	66.54
1885	2.08	1.87	.03	5.90	5.19	5.06	3.97	4.92	6.86	5.42	2.95	3.45	48.42
1886	4.20	1.85	4.17	6.00	6.40	8.45	1.90	4.03	7.24	.37	2.80	3.30	50.71
1887	.....	.....	.....	.....	.....	2.97	2.21	1.31	4.09	1.39	6.38	4.68	.....
1888	2.68	2.75	3.64	2.28	5.00	6.52	6.06	3.92	1.47	2.62	4.59	3.00	44.53
1889	2.65	2.04	1.81	1.70	7.10	4.43	3.45	.58	4.24	2.50	5.30	1.57	37.37
1890	9.61	4.50	4.21	4.62	2.58	2.49	1.17	2.60	2.89	1.00	2.06	1.64	39.37
1891	1.50	3.04	3.16	2.24	2.63	5.91	.93	4.37	.41	1.57	6.29	1.52	33.57
1892	2.62	4.41	2.37	7.91	7.79	5.37	3.10	2.64	2.06	1.53	4.26	2.28	46.36
1893	.84	3.72	4.54	11.86	5.61	5.16	1.63	.19	3.73	.49	1.90	2.40	41.12
1894	2.45	2.45	3.53	3.52	3.31	1.51	2.69	2.31	4.74	.78	1.89	2.73	31.92
1895	1.93	.79	2.66	3.19	3.16	2.64	6.97	2.05	3.02	.77	4.56	5.45	37.19
1896	3.54	3.32	2.37	2.26	7.28	5.03	2.26	1.50	5.82	2.80	5.36	.82	42.36
1897	4.97	3.25	7.50	3.90	.91	3.37	5.69	1.36	.18	.59	7.19	3.96	42.87
1898	3.97	4.23	9.73	3.58	6.51	4.28	4.37	2.61	3.80	5.58	2.26	1.47	52.39
1899	2.48	2.00	3.38	1.82	5.47	2.58	1.89	4.73	.84	2.98	2.13	3.90	34.20
1900	1.41	4.86	2.09	2.27	7.63	8.39	2.51	.51	4.27	2.04	4.05	1.20	41.23
1901	1.40	2.02	3.32	2.87	1.96	2.21	1.69	4.40	1.17	2.35	1.25	3.68	28.32
1902	.61	1.37	4.19	2.69	2.63	8.15	2.02	4.41	2.43	3.24	3.41	3.92	39.07
1903	1.29	3.48	3.34	4.07	1.71	2.41	2.29	2.84	1.84	2.51	1.10	1.80	28.08
1904	4.25	1.10	11.43	4.19	3.52	5.33	5.12	5.98	5.04	1.31	.20	1.84	49.31
1905	1.95	1.73	2.14	3.91	5.07	4.26	4.46	3.44	3.47	6.17	1.95	2.08	40.63
1906	4.50	3.07	5.35	2.72	3.04	3.65	1.37	2.03	5.52	1.48	4.25	2.61	39.59
1907	6.18	.75	2.55	2.73	4.03	6.20	5.27	5.97	.79	3.28	1.82	3.63	43.20
1908	1.46	5.68	3.93	5.35	8.73	5.29	4.94	2.25	.55	.02	2.72	.97	41.89
1909	2.46	5.83	1.35	6.79	4.79	4.85	4.45	1.55	6.21	4.54	5.09	2.36	50.27
1910	1.93	2.65	.07	2.55	3.76	4.17	8.01	3.35	6.47	5.05	.32	.94	39.27
1911	2.55	3.05	1.91	5.18	.86	2.38	1.47	4.04	11.66	5.59	3.52	2.55	44.76
Means	2.84	3.19	3.59	4.12	4.62	4.83	3.67	3.02	3.69	2.84	3.36	2.69	42.46

GRIGGSVILLE, PIKE COUNTY, ILLINOIS
Elevation, 650 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1882	1.32	1.00	3.50	4.00	6.50	7.37	3.00	2.37	1.62	4.12	2.62	1.62	39.04
1883	1.00	5.50	1.50	4.00	3.37	6.87	2.25	1.75	.87	6.37	3.25	.75	37.48
1884	1.25	2.37	.....	2.50	4.37	5.25	2.37	3.12	3.24	4.25	1.87	2.50	.....
1885	2.12	.87	.62	6.00	2.62	4.50	.87	2.62	5.75	2.75	1.50	1.75	31.97
1886	2.71	2.50	1.50	2.37	2.60	4.42	.20	3.08	6.36	.77	2.10	.66	29.27
1887	1.40	4.62	1.57	2.36	2.89	1.97	2.72	.61	4.36	.52	2.32	4.05	29.39
1888	3.11	2.40	3.84	1.25	7.83	9.77	6.81	2.86	4.00	1.38	4.30	2.47	50.52
1889	2.84	2.40	1.05	*2.30	9.38	4.93	2.87	.76	4.56	4.47	1.12	2.02	38.70

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

GRIGGSVILLE, PIKE COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1890	3.31	1.43	2.75	2.85	3.31	5.32	1.47	1.85	2.47	1.48	1.40	.28	27.92
1891	.87	3.52	2.25	3.61	2.42	1.76	.98	1.75	1.53	2.11	4.15	.87	25.82
1892	2.05	3.73	2.67	6.97	8.93	1.85	5.94	.85	3.46	1.52	3.20	.92	42.09
1893	.42	2.82	6.22	7.69	5.65	3.80	3.38	.35	1.37	.33	1.25	1.38	34.66
1894	2.06	2.36	2.15	2.85	2.30	2.97	.78	1.19	2.78	.78	1.48	1.32	23.02
1895	1.36	.22	3.15	2.35	2.46	3.94	6.25	2.63	3.51	.35	2.95	6.21	35.38
1896	1.50	2.16	.56	3.05	8.10	3.29	8.10	2.72	9.32	1.60	1.65	.38	42.43
1897	6.74	1.39	4.20	4.25	2.91	5.45	4.50	2.16	.46	.25	3.38	2.34	38.03
1898	4.46	2.19	5.78	4.95	8.30	4.94	3.56	4.49	6.83	3.01	3.66	.97	53.14
1899	.42	1.54	3.81	1.80	13.10	1.97	3.16	4.43	3.79	3.33	2.16	1.27	40.78
1900	1.78	6.01	1.54	1.81	4.20	2.40	3.59	1.81	5.50	2.80	1.66	.45	33.55
1901	2.06	1.51	3.25	1.46	.46	3.55	2.74	.22	3.65	1.80	.77	2.82	24.29
1902	.56	1.53	2.67	3.99	4.21	7.33	2.89	7.20	3.36	2.58	3.74	2.65	42.71
1903	1.30	2.62	3.20	4.59	3.34	3.14	2.10	4.52	4.89	2.53	.68	1.05	33.96
1904	3.93	1.60	5.60	5.92	5.86	5.05	5.09	5.41	6.26	.50	.15	1.02	46.39
1905	1.60	1.50	1.45	2.85	2.67	1.60	2.95	4.67	5.25	4.27	1.95	1.69	32.45
1906	2.74	2.26	3.05	2.71	2.83	2.74	.85	4.40	6.56	1.98	2.70	2.65	35.47
1907	5.38	.49	3.37	3.25	3.35	5.00	5.82	6.97	2.24	1.70	1.80	.52	38.79
1908	1.05	2.75	1.94	5.66	5.60	3.69	6.53	1.30	.88	.10	1.41	1.28	32.19
1909	1.81	2.25	1.53	4.47	7.50	3.27	4.11	.33	4.64	4.36	3.30	1.21	37.78
1910	1.07	.76	T	2.72	6.86	2.74	4.45	.85	4.57	1.65	1.36	.78	27.81
1911	1.47	1.97	1.97	4.57	1.21	1.19	2.92	3.68	13.77	3.00	2.15	1.47	39.37
Means	2.12	2.27	2.64	3.64	4.84	4.06	3.44	2.70	4.26	2.24	2.20	1.64	35.91

* Interpolated from surrounding stations.

HALFWAY, WILLIAMSON COUNTY, ILLINOIS

Elevation, 569 feet.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1885	.....	.....	1.95	2.95	3.73	6.62	0.88	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1887	1.47	6.91	2.96	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1893	.....	.....	.....	.....	.....	4.45	1.50	1.95	3.00	.....	.....	.....	.....
1894	2.00	1.30	3.40	1.60	3.35	2.10	.50	1.75	3.75	3.75	0.90	2.60	27.00
1895	3.35	.65	1.20	1.80	1.55	4.75	3.75	2.60	2.00	.20	6.61	5.70	34.16
1896	1.00	2.00	4.55	2.35	5.00	3.95	2.20	.50	2.60	2.00	1.91	.46	28.52
1897	2.83	2.86	11.43	6.34	2.58	5.45	2.66	.....	.....	1.15	.....	2.92	.....
1898	.....	.....	.....	.....	.....	2.73	2.19	.....	.....	.....	.....	.....	.....
1899	4.46	2.46	5.16	2.99	3.18	2.97	4.46	1.00	3.03	4.49	2.07	2.55	38.82
1900	1.71	4.02	1.89	1.91	3.09	8.65	2.99	.68	2.71	.73	3.40	1.92	33.70
1901	1.37	1.45	3.36	2.86	2.30	1.75	.50	3.60	1.64	2.77	1.30	5.21	28.11
1902	1.87	.74	3.16	2.57	3.63	2.87	1.57	3.58	2.54	.78	4.12	4.75	32.18
1903	2.03	4.65	4.03	2.75	3.06	2.78	2.78	1.46	1.61	3.19	.96	2.19	31.49
1904	3.60	3.94	5.97	4.50	3.18	2.47	4.82	2.80	5.55	.83	.53	2.81	41.00
1905	2.75	1.46	2.43	3.59	3.25	2.23	5.00	.....	.....	.....	2.13	3.19	.....
1906	6.18	2.24	6.23	1.52	2.21	4.12	3.76	3.79	6.79	1.35	6.40	6.60	51.19
1907	8.26	1.10	2.92	3.22	4.58	6.65	3.77	6.98	.79	.....	.....	.....	.....
1908	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1909	2.71	6.40	4.17	9.06	3.75	2.75	6.44	.95	4.68	.86	3.51	3.28	48.56
1910	2.24	2.39	.04	4.45	4.50	2.76	6.04	4.50	5.70	.....	.40	.....	.....
Means	2.99	2.78	3.81	3.40	3.25	3.89	3.10	2.58	3.31	1.84	2.56	3.40	35.88

NOTE—Values for 1885 are for Marion, seven miles distant.
Values for 1887 and for 1893 to 1897, inclusive, for Herrin, eleven miles distant.

HALLIDAYBORO, NEAR ELKVILLE, JACKSON COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1891	1.79	3.45	2.21	0.51	1.55	1.07	0.90	4.39	0.53	1.00	0.14	2.27	23.81
1892	.34	3.43	1.78	3.84	.....	.....	.....	1.73	.61	2.64	.....	1.31	.....
1893	.20	3.96	2.39	7.68	5.11	5.00	.91	1.26	3.03	3.56	2.56	1.65	37.31
1894	2.07	3.01	3.61	3.75	2.17	1.43	1.60	1.70	3.38	4.14	1.17	3.49	31.52
1895	2.80	1.20	2.79	2.13	1.89	2.98	5.23	3.17	2.91	.55	4.94	3.56	34.15

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

HALLIDAYBORO, NEAR ELKVILLE, JACKSON COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1896	1.99	2.32	4.33	2.17	*7.05	3.51	5.31	1.76	1.76	2.35	3.14	.89	36.58
1897	3.31	2.94	11.98	5.15	2.68	4.28	2.32	2.61	.64	1.64	3.55	3.38	44.48
1898	4.03	1.41	7.96	3.69	9.44	4.17	7.12	5.29	2.87	4.42	1.20	1.52	53.12
1899	3.58	2.54	3.58	2.32	3.30	3.75	3.45	2.30	1.07	4.71	2.18	2.15	34.93
1900	1.38	3.03	1.15	2.54	3.27	7.23	4.15	3.00	4.73	1.11	3.89	1.87	37.35
1901	1.25	1.25	4.21	1.79	2.03	1.60	.07	2.51	.74	1.95	1.23	3.33	21.96
1902	1.42	.97	2.87	2.09	5.01	3.85	.90	4.07	1.88	1.51	3.98	4.79	33.34
1903	1.22	3.65	3.98	1.98	1.67	1.91	2.51	3.58	2.56	.....	.....	.....	.....
1904	.....	.....	.....	.....	.....	3.90	4.50	2.60	4.10	.....	.....	.....	.....
Means	1.95	2.55	4.06	3.05	3.76	3.46	3.00	2.86	2.56	2.46	2.54	2.52	35.82

NOTE—Values from 1891-93, inclusive, are for Muddy Valley.
* Five days missing.

HANNIBAL, MARION COUNTY, MISSOURI
Elevation, 534 feet

Year	Jan	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1892	.....	.....	.....	.....	8.28	1.69	3.69	0.92	2.36	0.67	3.17	1.63	.....
1893	0.54	2.12	2.64	6.06	7.04	5.19	1.50	.54	1.47	.50	1.25	.37	29.22
1894	2.29	2.51	1.77	1.74	2.93	2.52	1.07	1.03	2.40	1.22	1.77	1.24	22.59
1895	1.57	.39	1.77	1.95	6.23	3.92	8.01	4.86	2.69	.36	4.40	5.98	42.13
1896	1.54	1.74	.92	2.83	7.14	2.40	9.44	1.58	3.54	1.72	1.73	.65	35.23
1897	6.36	1.54	4.30	3.96	1.13	6.08	8.04	2.48	.30	.45	2.07	1.86	38.57
1898	3.64	1.60	6.41	3.48	6.90	4.83	4.20	1.05	8.86	2.94	2.58	1.12	47.61
1899	.56	2.05	2.66	1.95	6.75	2.79	5.49	7.33	2.91	1.57	1.83	1.26	37.15
1900	1.69	3.87	1.16	1.34	5.65	1.75	1.79	1.86	4.57	3.88	1.27	.33	29.16
1901	1.85	1.32	2.78	1.55	1.65	2.48	1.95	.89	1.83	.86	.74	1.82	19.72
1902	.78	.68	2.95	2.99	4.83	6.22	2.96	4.02	2.36	2.94	2.53	1.76	35.02
1903	1.98	2.70	2.37	4.96	5.24	2.59	2.86	5.14	4.71	1.65	1.28	.93	36.41
1904	2.81	1.12	3.82	5.35	5.84	5.21	3.26	8.23	5.63	.61	.26	1.15	43.29
1905	1.45	1.39	1.52	4.07	2.30	1.54	4.33	4.61	6.40	3.38	1.34	1.23	33.56
1906	2.28	2.08	2.57	2.77	3.54	3.26	.90	4.90	5.72	.61	2.97	1.88	33.48
1907	5.17	.25	2.67	2.92	2.09	3.31	6.21	6.27	.92	2.74	1.22	1.75	35.52
1908	1.04	4.05	.94	3.64	4.60	6.27	1.48	2.94	3.31	.43	2.52	1.13	32.35
1909	1.95	3.95	1.65	4.78	7.63	2.15	4.73	.09	3.52	4.48	2.72	2.72	40.37
1910	1.98	.65	.15	2.60	6.58	4.39	9.32	1.64	5.37	1.14	.13	.75	34.70
1911	1.82	2.38	2.57	3.56	.70	1.32	2.58	1.46	11.64	1.66	2.30	2.48	34.47
Means	2.17	1.95	2.40	3.29	4.85	3.50	4.19	3.09	4.02	1.69	1.90	1.60	34.77

HAVANA, MASON COUNTY, ILLINOIS
Elevation, 475 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1870	.....	.....	.....	.....	.....	.....	.....	.....	3.36	3.95	2.50	1.71	.....
1871	4.28	1.60	4.25	2.05	1.00	3.05	5.25	2.15	.....	3.05	1.95	2.45	.....
1872	.50	1.60	2.48	2.03	2.13	9.83	4.78	1.13	4.35	.84	2.02	1.61	33.30
1873	5.00	1.83	.99	6.20	5.58	1.24	5.50	.89	5.69	3.17	1.68	7.72	45.49
1874	2.61	1.87	1.22	2.96	2.42	2.71	2.33	6.48	2.42	1.27	3.20	.93	30.42
1875	.37	2.54	4.14	2.44	4.74	4.83	8.57	1.30	5.84	2.80	.81	2.08	40.46
1876	.82	1.41	7.03	2.69	4.35	5.60	9.61	3.06	7.00	1.55	2.20	.20	45.52
1877	.81	.10	5.29	3.01	2.65	9.13	2.17	2.92	2.20	6.90	4.70	4.45	44.33
1878	1.28	3.56	2.95	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1892	1.65	1.98	1.54	4.84	7.69	3.02	2.29	.....	3.01	.98	3.25	1.42	.....
1893	.79	3.49	2.94	7.95	5.48	2.00	4.25	.73	2.34	.22	.76	2.06	33.01
1894	2.08	2.32	2.13	1.68	2.23	3.26	1.04	1.84	3.67	1.11	1.98	1.97	25.31
1895	1.36	.32	1.04	2.68	1.51	1.91	4.89	4.53	4.34	.41	3.80	6.03	32.82
1896	1.21	2.13	.98	3.15	4.31	3.25	4.87	3.36	5.30	.58	1.84	.33	31.31
1897	6.66	1.32	4.53	3.74	1.08	3.58	5.22	1.22	.51	.08	3.41	1.82	33.17
1898	4.64	2.08	4.84	2.90	7.63	4.58	2.49	2.78	6.92	2.55	2.24	1.45	45.10
1899	.77	2.21	3.39	1.26	7.31	2.24	7.11	3.26	4.18	3.34	2.41	2.73	40.21

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

HAVANA, MASON COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1900	1.88	5.54	.72	1.01	1.33	3.48	4.13	9.02	2.65	2.00	1.57	.40	33.73
1901	2.54	1.09	7.30	.89	.66	5.02	1.85	1.04	1.61	.66	.50	.73	23.89
1902	.85	1.42	4.31	2.70	2.57								
1903						2.55	3.02	5.48	5.66	2.18	.89	1.35	
1904	3.11	1.46	4.32	4.03	4.19	3.40	4.50	2.50	3.02	.31	.17	1.26	32.27
1905	1.60	2.20	1.69	3.91	2.69	2.71	2.58	4.42	4.69	2.91	2.54	1.72	33.66
1906	1.69	1.37	2.94	3.26	1.84	2.73	1.78	3.51	5.24	.85	2.37	1.53	29.11
1907	6.79	.22	2.54	3.11	2.54	3.89	6.23	6.73	1.53	.59	1.59	2.41	38.17
1908	.55	4.35	1.06	4.33	8.73	4.45	2.94	1.67	.74	.53	2.01	1.17	32.53
1909	1.55	3.85	1.80	5.39	4.64	5.68	4.84	1.95	5.68	3.13	3.61	2.13	44.25
1910	1.88	1.15	.26	3.82	7.34	2.24	3.35	.58	6.60	1.51	1.19	.98	30.90
1911	2.06	2.31	2.11	3.47	1.51	2.99	1.91	1.86	13.14	2.07	2.01	2.06	37.50
Means	2.19	2.05	2.92	3.29	3.77	3.83	4.15	2.97	4.26	1.83	2.12	2.02	34.63

HENRY, MARSHALL COUNTY, ILLINOIS

Elevation, 500 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1870	1.72							2.63	3.10	4.20	2.10	1.10	
1871	2.59	2.49	3.20	1.60	1.80	4.70	1.80	3.70	0.50	2.20	2.90	1.90	29.38
1872		.40	.55	4.10	3.50	5.30	3.30	6.30	5.30	1.50	1.20	.70	
1873	2.52	.80	.90	4.50	4.50	.90	2.20	2.00	2.50	1.80	1.40	4.65	28.67
1874	3.40	1.58	1.20	2.50	3.20	3.30	1.50	1.40	3.20	1.90	3.20	.50	26.88
1875	.40	1.90	1.35	2.30	3.70	3.50	8.30	2.10	5.10	1.90	.67	2.70	33.92
1876	3.40	2.60	2.90	4.00	3.40	5.60	6.10	1.20	2.50	1.20	3.60	.76	37.26
1877	.60		2.60	3.70	2.40	5.90	3.10	1.00	.90	6.10	4.00	2.90	
1878	.50	1.80	2.30	5.40	6.10	3.10	1.10	5.60	.90	2.90	.40	1.80	31.90
1879	.60												
1887	2.24	4.55	.72	.73	1.52	1.70	1.30	4.80	2.70	2.96	1.48	3.53	28.23
1888	1.07	1.57	2.54	.93	6.87	2.29	2.14	1.25	1.21	2.71	3.10	2.22	27.90
1889	1.65	.85	1.60	2.60	4.12	5.72	4.97	.75	3.83	2.02	1.86	1.45	31.42
1890	2.05	2.03	2.55	3.39	4.51	3.98	.66	1.45	3.07	5.57	1.45	.20	30.94
1891	2.36	1.35	3.13	3.50	2.68	6.79	1.99	4.45	.98	1.43	4.66	2.28	35.60
1892	1.20	.60	2.63	3.33	12.57	10.01	4.22	.32	1.25	.70	2.65	2.30	41.78
1893	1.70	.90		5.10	1.60	2.95	1.25	.38	1.91	.95			
1894					3.20	4.91	.25	1.82	7.06	1.29		1.11	
1895	1.00	.20	.86	1.56	1.53	1.39	9.66	2.42	1.46	1.24	4.31	5.16	30.79
1896	.92	.97	.93	4.45	7.05	2.81	.965	2.13	6.95	.08	2.75	.12	38.81
1897	5.47	1.65	3.79	2.36	.95	7.35	2.92	.71	.95	.18	4.33	1.03	31.69
1898	4.00	†2.10	†6.15	3.68	6.41	3.61	1.10	7.10	6.91	3.11	2.46	1.32	47.95
1899	.33	1.94	2.26	1.06	5.64	3.00	4.57	1.63	3.12	3.45	1.97	2.48	31.45
1900	1.82	3.67	3.15	1.68	4.76	2.52	2.76	6.79	3.64	3.94	2.25	.14	37.12
1901	1.45	1.23	3.97	.96	2.20	2.83	3.40	1.90	2.56	.83	1.50	1.76	24.59
1902	.46	1.60	3.60	2.63	4.14	11.21	11.01	5.44	6.10	1.60	3.38	1.88	53.05
1903	1.20	2.59	3.84	5.22	3.85	2.67	3.28	5.50	6.68	1.35	1.69	1.86	39.73
1904	2.84	1.43	4.28	3.51	3.85	3.22	5.73	4.51	3.66	.31	T	1.71	35.05
1905	1.09	1.76	2.64	3.87	3.60	5.46	2.51	4.20	1.86	2.91	2.21	1.63	33.74
1906	2.23	1.70	2.31	1.65	2.53	3.31	2.57	3.91	5.03	1.92	2.56	2.17	31.89
1907	5.85	.16	3.20	2.79	3.65	3.79	5.43	4.58	4.51	.80	1.92	1.23	37.91
1908	1.12	2.51	3.00	4.64	8.90	4.60	2.82	.94	.80	.77	1.87	.81	32.78
1909	1.44	3.55	1.70	7.11	3.41	3.77	3.81	3.93	3.93	2.48	4.66	3.20	43.05
1910	2.24	1.11	.12	3.28	6.00	.96	1.27	1.77	3.53	1.48	.54	1.25	23.55
1911	2.10	1.91	1.79				3.25	2.99	7.19	2.24	2.61	2.29	
Means	1.92	1.73	2.45	3.12	4.23	4.16	3.64	2.99	3.38	2.06	2.37	1.84	34.81

NOTES—Values from 1871-93, inclusive, of Hennepin, ten miles distant.
Values from May, 1894-January, 1898, inclusive, for Clear Creek less than seventeen miles distant.
† Estimated.

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

HIGHLAND, MADISON COUNTY, ILLINOIS

Elevation, 620 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1861	.....	.....	7.20	3.21	3.24	3.08	0.77	4.07	3.71	2.83	0.61	1.57	.....
1862	4.54	.94	2.89	6.27	6.61	5.27	7.81	2.64	3.97	6.41	5.94	6.21	59.50
1863	3.93	4.21	2.50	.....	1.99	1.84	2.24	4.06	1.09	3.69	2.39	3.38	.....
1864	3.03	.66	1.27	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	3.83	3.94	3.46	4.74	3.95	3.40	3.61	3.59	2.92	4.31	2.98	3.72	.....

HILLSBORO, MONTGOMERY COUNTY, ILLINOIS

Elevation, 675 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1878	.....	.....	.....	.....	9.60	1.00	0.90	3.80	3.20	5.00	0.50	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1889	.....	.....	.....	0.64	8.63	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1895	.....	.....	.....	.....	1.72	2.47	6.31	3.24	2.83	.63	3.28	5.44	.....
1896	.73	2.43	1.23	1.98	6.62	3.14	4.15	2.08	4.80	1.74	2.58	.77	32.25
1897	4.02	2.02	6.04	4.07	1.59	3.93	5.16	1.16	T	.25	5.80	2.82	36.86
1898	5.51	3.07	7.78	3.80	7.45	3.39	5.33	2.69	5.56	5.13	2.32	2.00	54.03
1899	1.83	2.51	3.54	1.29	7.28	2.84	2.18	7.49	1.59	3.67	2.45	3.48	40.15
1900	.52	4.60	1.70	1.31	5.14	6.10	2.96	.42	3.27	3.02	2.78	.95	32.76
1901	1.92	1.98	3.05	2.15	1.46	2.54	1.93	4.26	1.03	2.31	1.72	3.66	28.01
1902	.82	.89	4.95	2.79	3.31	8.93	1.39	5.71	5.32	2.52	3.34	4.00	43.97
1903	1.19	3.16	2.22	3.57	2.83	4.26	2.56	5.63	1.87	1.78	.61	3.05	32.73
1904	3.15	.90	6.53	5.05	4.14	4.54	5.38	4.41	5.44	.62	.09	1.01	41.26
1905	2.98	.86	1.63	3.21	4.67	1.96	5.32	2.53	3.16	9.72	1.65	2.15	39.84
1906	3.56	2.42	4.47	2.08	3.15	4.85	.50	2.37	5.83	1.65	4.25	2.02	37.15
1907	4.89	.55	1.90	2.78	7.00	4.88	7.53	5.81	.96	3.90	1.77	3.36	45.33
1908	2.09	4.76	2.10	5.03	8.28	4.53	2.52	.78	1.54	.10	1.85	1.62	35.20
1909	2.30	4.85	2.78	7.81	4.33	3.79	6.25	1.04	6.45	3.79	6.23	2.16	51.78
1910	2.26	2.76	T	5.19	6.03	3.57	4.20	5.19	6.14	5.00	1.05	1.45	42.84
1911	1.93	2.78	1.92	4.95	1.50	1.28	2.78	4.14	7.46	4.08	2.71	1.94	37.47
Means	2.48	2.44	3.37	3.60	4.98	3.78	3.74	3.44	3.70	3.05	2.75	2.47	39.48

HOOPESTON, VERMILION COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1887	0.64	3.40	0.64	1.68	2.62	1.24	T	2.98	5.80	2.25	3.50	4.82	29.57
1888	7.59	3.87	3.05	2.18	8.09	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1901	.....	.....	4.12	1.50	1.20	2.92	1.39	3.56	5.41	2.80	1.06	2.13	.....
1902	.80	.57	1.88	1.02	4.71	14.37	4.85	2.30	3.01	1.99	2.85	2.60	40.98
1903	1.94	3.03	.64	6.45	3.77	1.84	3.85	5.78	1.64	1.92	1.80	2.45	35.11
1904	5.20	2.16	7.36	2.61	2.35	1.87	4.36	2.81	3.91	.38	.08	1.35	34.44
1905	1.76	2.77	1.24	3.91	4.53	2.15	3.81	3.75	5.09	2.82	2.83	1.47	36.13
1906	2.52	1.52	4.46	1.84	3.58	1.57	2.34	7.87	2.31	1.50	5.55	3.57	38.63
1907	5.89	.22	4.26	2.90	3.28	5.34	6.48	2.08	5.09	.94	2.27	3.88	42.63
1908	1.41	6.23	3.64	4.45	8.07	.86	2.19	1.11	1.79	.33	2.81	1.61	34.50
1909	2.87	6.88	1.76	6.45	4.24	4.18	6.07	5.28	2.33	2.10	3.47	3.61	49.24
1910	2.99	1.86	.46	2.46	5.38	1.73	4.66	2.23	5.12	*1.45	.85	2.07	31.26
1911	3.04	1.97	2.29	4.45	2.26	2.13	3.42	2.92	7.28	4.19	3.54	1.71	39.20
Means	3.05	2.87	2.75	3.22	4.16	3.35	3.95	3.56	4.06	1.89	2.55	2.61	37.43

NOTE—Values from March, 1901–May, 1902, inclusive, are for Wellington, six miles distant.
* For Rantoul.

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

HOYLETON, WASHINGTON COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1864	.....	.....	.....	7.44	.....	3.00	6.00	2.62	2.00	1.50	3.50	3.30	.....
1865	0.50	.....	.....	1.00	1.35	5.75	.....	.....	.....	.....	.....	.....	.....
1866	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	.....	.....	.....	4.22	.....	4.38	.....	.....	.....	.....	.....	.....	.....

IRISHTOWN, CLINTON COUNTY, ILLINOIS (NEAR BREESE)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1885	.....	.....	.....	3.50	3.72	5.29	0.62	4.06	6.77	4.39	2.97	3.49	.....
1886	3.12	1.40	2.42	2.09	2.35	8.10	1.34	3.78	5.48	.72	3.91	2.67	37.38
1887	1.31	4.46	4.51	3.47	4.03	2.75	2.02	.38	3.10	1.12	7.45	4.07	38.67
1888	2.54	2.77	3.46	1.77	3.95	7.59	3.61	7.18	.87	2.47	3.58	2.78	.....
1889	2.76	1.76	1.81	.....	4.93	6.41	4.86	1.09	3.43	1.83	5.32	1.48	.....
1890	8.41	3.86	4.56	5.40	3.65	3.08	.58	1.22	3.44	.60	2.39	.77	37.96
1891	1.45	3.75	2.57	2.62	3.18	5.30	.73	2.37	.87	1.69	6.05	1.05	31.64
1892	2.44	3.03	1.24	8.33	6.81	4.60	4.21	.....	1.09	1.28	4.23	1.36	.....
Means	3.15	3.01	2.94	3.88	4.08	5.39	2.25	2.87	3.13	1.76	4.49	2.21	36.41

JOLIET, WILL COUNTY, ILLINOIS

Elevation, 541 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1843	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.12	.....	.....	.....
1844	.....	.....	.....	.....	.....	.....	7.25	5.00	.....	.....	.....	.....	.....
1845	4.25	1.75	.....	3.25	0.13	.....	4.00	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1887	.....	.....	.....	.....	.97	2.07	2.47	2.72	2.96	2.95	1.85	3.17	.....
1888	.90	1.00	2.35	2.10	8.50	1.70	.70	6.00	.90	3.30	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1893	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.87	1.57	.....
1894	1.16	1.31	2.87	2.23	3.69	2.84	.46	.85	5.99	1.18	1.68	1.00	25.26
1895	1.82	.67	1.04	1.92	1.95	1.26	4.32	2.96	.93	.67	2.90	6.62	27.06
1896	1.14	2.07	1.15	2.82	5.28	3.89	4.97	2.75	6.69	.88	2.96	.36	34.94
1897	6.67	1.84	3.80	2.87	1.25	5.19	1.59	.55	.63	.44	4.42	1.68	30.93
1898	4.05	2.28	6.12	1.42	3.82	7.89	1.59	4.69	3.20	4.53	2.61	2.15	44.35
1899	.82	1.68	2.23	.35	4.69	2.17	5.26	1.74	2.44	2.39	1.15	1.70	26.62
1900	1.58	4.29	2.24	.79	4.27	1.80	5.08	5.74	2.05	1.61	3.10	.53	33.08
1901	1.88	1.62	3.62	.56	.81	3.14	5.42	2.84	2.55	.85	1.63	2.36	27.28
1902	.55	1.43	5.51	2.36	7.48	12.86	9.38	3.15	6.28	2.44	2.99	1.68	56.11
1903	1.05	2.92	2.22	3.62	2.49	1.68	4.46	4.77	4.98	1.40	.86	2.18	32.63
1904	2.42	1.75	4.97	3.81	3.19	.94	2.97	3.19	4.95	1.44	.10	1.63	31.36
1905	1.18	1.43	2.29	4.13	5.42	5.10	4.18	4.29	3.63	3.57	2.66	1.46	39.34
1906	2.23	2.30	1.61	1.67	2.00	1.85	2.51	4.00	5.68	2.76	2.63	3.13	32.37
1907	5.70	.32	3.00	2.28	3.32	1.70	5.38	4.66	6.13	.66	1.86	3.07	38.08
1908	.77	2.66	4.33	3.32	6.95	1.30	3.79	3.80	1.32	.82	2.77	1.30	33.13
1909	1.12	3.38	1.56	6.60	3.46	3.80	1.69	2.98	3.09	1.68	4.55	3.50	37.33
1910	2.52	1.21	.24	3.81	4.90	.81	1.46	3.17	2.75	1.68	.62	1.12	24.29
1911	1.58	1.62	1.39	4.45	3.65	4.65	2.46	4.54	12.27	4.18	2.87	1.91	45.57
Means	2.17	1.88	2.76	2.72	3.73	3.34	3.69	3.54	3.97	1.92	2.31	2.10	34.44

From November 1893–April 1895, inclusive, the values are for Braidwood, nineteen miles distant.

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

KANKAKEE, KANKAKEE COUNTY, ILLINOIS

Elevation, 642 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1886	.....	.....	.....	.....	.....	.....	.....	2.83	4.66	.....	1.10	1.05	.....
1887	1.45	4.50	0.68	0.90	1.93	1.75	1.10	2.65	.....	1.20	.....	.....	.....
1888	.....	.....	.....	1.15	.....	.....	.....	.....	.....	.....	.....	1.50	.....
1889	1.54	1.02	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1890	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1891	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1892	.....	.....	.....	.....	10.09	4.67	2.51	2.24	2.03	.86	2.96	.....	.....
1893	1.00	.38	1.13	5.45	4.83	1.28	T	.55	1.69	1.70	.....	.....	.....
1894	2.35	1.67	2.04	3.54	3.29	1.11	.85	1.30	8.44	.50	2.20	.94	28.23
1895	1.00	.19	1.02	2.81	2.64	1.11	2.53	2.61	1.79	1.52	3.02	5.81	26.05
1896	1.09	*1.94	.53	1.93	5.53	5.64	7.31	4.99	5.82	†.25	1.95	.17	37.15
1897	3.23	1.07	3.09	1.99	1.51	3.32	2.15	.36	.20	1.60	3.62	†2.20	24.34
1898	†3.44	†1.90	7.69	1.31	5.66	1.72	1.69	4.20	5.80	4.18	2.33	1.17	40.09
1899	1.20	†.89	2.75	.41	3.90	2.31	3.78	2.20	2.83	†3.17	2.00	†3.11	28.55
Means	1.81	1.44	2.37	2.19	4.32	2.55	2.44	2.39	3.69	1.66	2.40	1.99	30.74

* From Gilman, twenty-five miles distant.
† From Mortinton, fifteen miles distant.

KEOKUK, LEE COUNTY, IOWA

Elevation, 614 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1872	0.07	0.39	2.88	3.86	3.70	5.81	6.77	1.97	2.26	.42	0.74	0.50	29.37
1873	3.40	.53	.51	5.65	3.42	1.21	7.73	.54	3.37	4.69	1.43	8.56	41.04
1874	3.92	.88	1.14	2.40	1.65	4.01	4.61	3.87	7.92	1.94	2.17	1.26	35.77
1875	.61	1.84	1.67	.89	6.70	8.33	12.70	3.83	4.62	2.71	.59	3.93	48.42
1876	3.68	1.45	3.45	3.99	5.28	6.73	6.79	4.03	11.08	2.12	2.82	.23	51.65
1877	.84	.15	3.86	4.22	5.55	7.82	7.06	2.52	3.61	7.11	3.05	2.90	48.59
1878	.17	2.95	3.78	2.31	3.47	3.93	2.37	5.27	1.36	2.31	1.93	1.95	31.80
1879	.50	.53	1.71	1.56	2.27	2.63	1.98	4.57	1.12	.28	3.91	1.45	22.51
1880	3.91	1.94	1.83	4.79	5.92	3.06	2.25	3.81	3.21	2.02	1.13	.67	34.54
1881	.50	2.58	2.42	3.12	1.35	8.70	3.08	.86	4.10	8.01	2.59	1.70	39.01
1882	1.07	1.54	3.30	3.22	7.11	9.45	4.53	3.09	1.52	2.71	2.25	1.75	41.54
1883	1.24	6.13	1.07	2.97	4.87	5.88	3.15	1.32	1.76	6.95	2.09	1.20	38.63
1884	.85	1.88	3.37	1.31	3.16	4.03	2.30	2.74	4.25	3.35	1.73	3.91	32.88
1885	2.44	1.14	.17	3.33	2.59	6.97	2.29	5.98	3.77	3.59	.88	1.96	35.11
1886	2.08	1.40	2.25	1.52	4.49	2.86	.65	5.90	3.95	2.38	1.15	1.03	29.66
1887	1.48	5.19	.76	1.84	2.54	1.55	1.57	2.38	3.13	1.98	1.18	2.73	26.83
1888	1.57	2.17	3.45	1.85	5.06	5.42	6.00	2.07	2.13	1.63	2.83	1.61	35.79
1889	1.89	.90	1.04	3.60	5.72	2.97	6.78	.95	5.14	2.88	1.80	1.08	34.75
1890	1.81	1.09	2.43	1.79	3.34	3.41	2.49	1.77	4.46	2.44	1.87	.03	26.93
1891	2.59	1.32	2.27	5.06	2.56	3.66	2.77	6.10	.49	1.49	3.60	1.33	33.24
1892	1.96	1.61	2.91	6.15	6.34	2.65	6.18	1.07	3.21	.71	3.16	1.50	37.45
1893	.92	1.76	2.66	5.41	4.36	2.37	2.60	1.16	3.18	.32	2.29	.90	27.94
1894	2.24	1.46	2.52	2.75	3.06	2.85	.37	.51	4.86	1.28	2.24	1.06	25.20
1895	1.44	.19	1.06	3.38	3.15	2.61	5.46	2.68	2.67	.37	2.58	4.24	29.82
1896	.85	1.23	.88	2.35	4.40	2.18	8.01	3.90	9.44	1.71	1.01	.81	36.77
1897	4.90	.96	4.16	3.54	1.86	5.43	6.75	.65	.64	.24	2.17	1.84	33.14
1898	3.13	1.16	5.98	4.80	6.70	4.77	3.06	6.92	8.07	3.99	1.52	1.38	51.48
1899	.49	1.65	2.66	3.28	11.47	2.78	5.39	4.01	4.32	2.06	1.19	1.67	40.97
1900	2.46	3.24	1.43	2.10	4.56	1.06	2.20	4.21	5.02	5.36	1.72	.25	33.61
1901	1.41	.75	2.59	2.29	1.95	6.34	2.02	.15	2.14	.93	.80	1.17	22.54
1902	.44	1.02	2.24	3.13	3.63	7.59	4.87	6.93	1.82	2.38	2.60	2.21	38.86
1903	.77	1.42	3.03	4.91	3.56	1.40	1.27	4.80	7.16	3.23	.87	.86	33.28
1904	2.70	.70	3.46	5.11	3.94	3.62	4.48	4.63	8.33	.30	.21	1.45	38.93
1905	.60	1.37	1.78	3.32	3.01	6.57	2.89	3.16	4.15	3.41	2.32	1.03	33.61
1906	2.40	2.50	2.82	2.16	1.83	1.48	1.46	2.87	2.94	.73	1.92	1.90	25.01
1907	5.07	.10	5.05	2.02	3.44	6.40	6.26	5.50	1.94	.47	1.17	1.38	38.80
1908	.51	2.86	1.76	1.82	10.09	4.32	3.70	2.50	2.22	.87	3.05	.58	34.28
1909	1.26	2.44	1.84	4.99	3.03	5.11	5.46	.68	3.46	4.48	3.97	2.56	39.28
1910	1.61	.99	.53	2.91	6.87	1.34	2.74	.92	2.08	.81	.23	.79	21.82
1911	2.66	2.35	1.79	4.13	.42	.65	6.48	1.74	7.67	2.19	2.88	1.87	34.83
Means	1.81	1.64	2.36	3.24	4.21	4.25	4.23	3.06	3.97	2.43	1.94	1.73	34.88

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

KISHWAUKEE, WINNEBAGO COUNTY, ILLINOIS

Elevation, 730 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1899	0.43	0.95	1.74	.....	.....	.....	.....	.....	.....	1.60	1.12	2.23	.....
1900	.....	3.39	1.07	2.90	3.46	2.58	4.04	5.35	2.98	3.64	1.93	.48	.....
1901	1.41	2.40	3.93	.46	2.00	3.13	4.39	1.36	3.34	.82	1.03	1.53	25.80
1902	.48	1.63	3.17	1.62	7.88	7.45	6.87	1.49	7.04	2.07	2.94	1.87	44.51
1903	.58	1.19	3.84	6.00	3.73	2.38	5.25	9.29	6.06	2.77	1.25	1.04	43.38
1904	2.90	1.30	4.43	2.84	3.36	1.24	3.15	3.35	3.52	1.89	.02	1.93	29.93
1905	.61	1.42	3.80	2.90	5.51	2.65	2.65	3.13	1.95	3.53	2.24	1.45	31.84
1906	2.60	1.64	2.88	1.47	3.07	3.11	2.99	6.91	4.51	1.83	2.56	1.74	35.31
1907	3.58	.29	2.15	2.34	2.90	4.94	5.07	3.76	5.70	.74	1.31	1.23	34.01
1908	.63	2.09	4.17	3.59	7.84	2.31	3.08	2.34	.94	1.07	2.82	.56	31.44
1909	1.91	1.83	.93	5.96	4.39	3.90	1.25	6.41	3.59	.84	4.11	3.23	38.35
1910	1.54	.52	.27	3.84	4.25	.63	2.04	3.58	2.66	.84	1.14	.57	21.88
1911	.80	2.56	.70	5.17	2.55	3.70	1.27	7.04	5.48	2.39	4.57	1.60	37.83
Means	1.46	1.63	2.54	3.26	4.24	3.17	3.50	4.50	3.94	1.91	2.02	1.45	34.11

KNOXVILLE, KNOX COUNTY, ILLINOIS

Elevation, 775 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
†1861	.....	2.76	3.22	3.60	2.65	3.71	3.56	1.52	6.00	4.35	0.98	1.70	.....
1862	3.47	.44	2.38	4.78	3.27	5.71	5.58	5.67	5.58	.96	2.03	2.88	42.75
1863	2.85	2.66	1.80	.....	3.62	.....	.74	1.80	1.85	4.74	.34	2.41	.....
1864	1.23	.57	3.14	4.02	1.80	4.08	3.40	2.22	2.16	2.60	2.96	4.55	32.73
1865	.30	2.69	3.52	4.65	1.58	3.94	6.74	4.70	5.08	2.39	.00	.70	36.29
1866	2.75	.98	1.87	2.52	1.14	.88	4.64	4.82	8.38	2.00	.41	1.58	31.97
1867	.45	2.36	1.92	1.16	6.38	3.13	.41	3.21	.94	.91	1.40	.96	23.23
1868	.30	5.00	5.40	5.74	6.74	1.22	1.79	3.51	5.28	.....	3.74	1.00	.....
1869	1.62	2.30	1.30	1.01	3.18	8.54	9.00	6.31	1.06	1.54	2.80	1.22	39.88
1870	.63	.30	3.86	.60	1.35	1.27	1.10	3.70	3.96	4.46	.60	1.08	22.91
1871	2.80	1.50	2.05	2.64	2.72	3.41	3.51	6.46	.90	3.80	1.94	2.60	34.33
1872	.....	.....	1.70	2.25	2.34	4.80	.....	.....	.....	.....	.....	.....	.....
1873	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1874	.....	.....	.....	.....	.....	.....	.....	6.65	8.00	1.27	2.76	1.03	.....
1875	.....	.....	.....	.....	.....	.....	.....	.....	8.59	2.92	.03	2.23	.....
1876	9.78	4.25	.....	9.25	3.60	4.32	.....	.....	8.28	.....	.....	.....	.....
1877	.04	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
†1885	.....	.....	.20	3.56	2.57	3.40	3.13	7.40	4.15	3.69	.91	3.75	.....
1886	3.05	2.00	4.50	2.68	8.15	3.40	1.00	3.37	5.03	3.35	1.51	1.02	39.06
1887	3.20	6.55	1.25	1.55	3.60	3.00	6.60	3.95	.....	2.75	2.05	3.60	.....
1888	1.45	2.50	3.75	1.62	7.90	4.10	3.60	5.25	1.65	3.45	4.15	2.85	42.27
1889	1.73	1.30	1.35	4.30	3.90	4.13	2.00	.50	2.35	1.65	3.20	1.90	28.31
†1895	1.85	.39	1.45	3.61	3.62	1.40	8.81	2.54	6.10	1.00	3.51	5.13	39.41
1896	1.15	1.40	1.57	3.62	4.19	3.65	7.25	4.91	5.28	2.06	2.30	.38	37.76
1897	6.32	.98	5.67	4.18	1.20	2.38	4.45	1.01	2.05	.20	2.47	1.47	32.38
1898	5.30	1.86	5.90	3.85	7.98	5.02	.97	10.18	5.69	2.48	2.67	.83	52.73
1899	.42	1.74	3.01	1.55	6.87	2.00	2.71	1.14	2.95	2.48	1.42	2.64	28.93
1900	1.95	3.66	3.20	1.22	3.97	.42	3.21	4.23	3.86	2.94	2.28	.45	31.39
1901	1.11	1.07	2.55	1.14	1.25	3.17	2.51	.65	2.40	.91	1.15	.89	18.80
1902	.52	1.42	3.66	2.22	3.70	9.63	8.07	7.90	4.04	3.27	2.00	2.07	48.50
1903	1.10	1.72	2.95	5.62	4.57	2.43	1.53	6.40	2.45	2.20	1.08	.98	33.03
1904	3.06	.74	3.58	2.32	3.81	3.50	7.87	3.05	5.54	.10	.20	1.77	35.54
1905	1.07	1.13	1.96	5.38	3.38	4.26	4.59	4.37	2.08	2.69	2.30	1.78	34.99
1906	3.30	2.13	3.51	2.52	2.60	2.50	3.08	2.83	4.30	1.46	2.65	1.81	32.69
1907	.....	.07	.....	.29	2.29	.....	5.92	5.84	2.08	.11	1.32	.....	.....
1908	.99	4.39	2.78	2.19	9.55	2.53	4.10	3.81	1.39	1.38	3.24	1.36	37.71
1909	1.59	3.24	1.76	4.47	4.03	2.56	7.41	.98	3.63	3.52	5.52	4.18	42.89
Means	2.18	1.92	2.80	3.13	3.92	3.50	4.17	4.09	4.03	2.30	2.00	1.96	35.22

† Values from 1861–1874, inclusive, are for Galesburg; values from 1875–1877, inclusive, are for Abingdon those from 1885–1889, inclusive, are for Oneida: Galesburg is six miles from Knoxville, Oneida is twelve, miles from Knoxville, and Abingdon is nine miles from Knoxville.

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

LACON, MARSHALL COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1887	.....	.....	.....	1.69	.....	3.47	2.31	3.20	2.82	2.76	1.91	5.24	.....
1888	2.30	2.65	4.60	1.64	7.52	2.26	3.61	2.20	1.04	3.55	2.83	2.67	36.87
1889	2.28	.61	1.99	2.57	3.92	4.93	4.53	.15	2.96	2.25	2.71	1.77	30.67
1890	2.77	1.86	4.18	1.69	3.95	3.84	.55	1.85	1.96	3.95	2.17	.87	29.64
1891	2.45	2.31	3.34	3.94	1.55	6.83	1.45	6.09	.39	*1.40	*4.50	*2.00	37.25
Means	2.45	1.86	3.53	2.31	4.24	4.26	2.49	2.70	1.83	2.78	2.82	2.51	33.61

* Interpolated from surrounding stations.

LAGRANGE, COOK COUNTY, ILLINOIS

Elevation, 657 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1892	.....	0.83	2.20	2.76	8.00	12.25	.....	.....	1.70	0.81	2.24	1.93	.....
1893	1.91	1.79	2.15	5.61	2.27	5.30	2.96	.23	2.84	.52	2.26	2.00	29.84
1894	1.64	1.72	.....	.....	3.16	2.09	.....	.....	8.87	1.04	1.45	.71	.....
1895	1.64	.45	.85	1.17	2.24	2.00	3.20	5.69	1.10	.77	5.09	6.04	30.24
1896	1.16	2.39	1.04	4.21	4.73	2.63	3.00	3.59	5.39	.85	3.03	.10	32.10
1897	6.09	1.83	4.00	3.50	1.85	3.74	2.97	1.57	.80	.33	3.82	1.36	31.86
1898	4.30	2.60	5.87	1.14	3.50	6.92	2.77	4.59	3.97	4.21	2.69	1.56	44.12
1899	.37	1.91	2.06	.35	5.98	1.86	8.80	2.18	1.73	2.54	1.53	1.63	30.94
1900	1.30	3.38	1.84	.95	3.78	3.40	5.64	4.81	1.95	1.12	3.32	.32	31.81
1901	1.45	2.03	3.78	.47	.96	4.38	2.87	2.00	3.56	1.65	1.04	1.33	25.52
1902	.53	1.34	3.19	1.89	6.16	10.64	7.51	2.08	5.91	2.09	2.68	2.31	46.33
1903	.86	2.90	2.51	3.51	1.27	2.06	4.24	3.57	5.54	1.50	.37	2.08	30.41
1904	1.65	1.56	5.30	2.02	1.57	.79	3.55	3.06	3.69	1.59	T	.99	25.77
1905	.72	1.06	1.58	3.41	5.91	3.33	8.56	2.65	4.25	1.65	2.77	.46	31.35
1906	1.61	2.50	2.56	1.59	3.42	2.49	2.16	5.53	6.19	2.72	2.69	2.36	35.82
1907	5.17	.40	2.71	2.45	2.61	3.99	4.54	4.28	5.72	1.06	1.15	1.81	35.88
1908	1.41	3.40	3.20	2.71	6.16	1.30	3.54	7.75	1.40	.89	2.40	1.34	35.50
1909	1.68	3.73	1.42	8.22	2.54	6.33	1.28	6.45	3.26	1.24	4.05	4.12	44.32
1910	2.35	.83	.05	3.47	5.13	1.06	.....	.....	4.39	1.44	1.73	1.28	.....
1911	1.23	2.88	1.32	3.40	2.44	2.57	2.39	3.45	3.64	3.70	2.90	2.01	31.92
Means	1.95	1.98	2.50	2.78	3.68	3.96	3.82	3.75	3.79	1.58	2.36	1.79	33.75

LAHARPE, HANCOCK COUNTY, ILLINOIS

Elevation, 698 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1895	.....	.....	.....	1.71	1.40	3.13	4.89	3.24	3.25	0.34	3.40	5.65	.....
1896	1.26	2.14	1.18	2.35	4.80	5.16	7.80	7.96	12.28	2.00	2.53	.99	50.45
1897	10.38	1.83	0.22	5.85	2.41	5.80	3.87	1.86	1.39	.26	1.26	2.10	43.23
1898	2.94	1.40	5.12	3.91	8.56	2.59	2.35	10.40	6.42	3.15	1.65	.42	48.91
1899	.35	1.38	3.14	3.17	12.57	2.60	2.58	4.32	2.82	1.97	1.52	1.17	37.59
1900	2.15	4.26	1.55	1.52	3.50	.53	3.06	2.85	2.90	4.70	1.38	.25	28.65
1901	1.17	1.65	2.24	1.30	2.10	5.10	5.15	.50	2.07	.85	1.08	.69	23.90
1902	.65	1.30	3.40	2.95	3.00	9.70	6.75	9.05	2.50	2.65	2.90	2.04	46.89
1903	2.07	2.13	1.92	5.30	3.00	2.20	1.45	5.00	7.65	4.05	1.02	.88	36.67
1904	5.48	.90	5.17	2.85	4.60	4.00	6.45	4.20	8.15	.45	.50	1.92	44.67
1905	1.13	1.99	1.25	4.47	4.55	12.60	2.40	5.55	1.65	2.80	2.10	1.14	41.63
1906	3.35	2.50	4.19	1.70	3.70	3.35	4.25	2.15	4.10	1.00	1.15	2.20	33.64
1907	7.62	.30	6.40	2.60	2.75	4.45	6.70	5.10	1.95	.30	.90	1.26	40.33
1908	2.45	3.10	2.27	1.64	11.25	5.60	2.40	1.24	2.03	.70	2.34	.60	35.62
1909	1.35	3.32	2.09	3.52	4.87	7.15	6.18	3.31	4.68	3.52	3.61	2.92	46.52
1910	.62	.60	.34	2.37	6.88	1.99	3.61	.38	2.74	.75	.11	.82	21.21
1911	4.17	1.87	1.90	2.94	1.53	1.68	7.17	1.44	11.84	2.06	1.88	2.07	40.55
Means	2.95	1.92	3.02	2.95	4.79	4.56	4.53	4.03	4.61	1.86	1.72	1.60	38.78

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

LA E FOREST, LAKE COUNTY, ILLINOIS

Elevation, 593 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1886	.....	.....	.....	.....	4.05	2.27	0.54	6.65	4.88	1.37	1.42	2.71	.....
1887	3.84	5.43	1.06	1.70	2.01	1.00	1.55	3.63	4.47	2.97	2.10	4.04	33.80
1888	1.70	1.30	3.58	1.77	4.29	2.68	1.89	3.46	1.50	2.57	2.86	1.69	29.29
1889	1.62	1.27	1.82	2.83	4.60	4.21	4.77	.71	2.22	2.40	2.45	2.66	31.56
1890	2.76	1.77	3.29	4.29	5.08	5.29	.....	.....	.....	.....	.....	.....	.....
Means	2.48	2.44	2.44	2.65	4.01	3.09	2.19	3.61	3.27	2.33	2.21	2.78	31.55

LANARK, C RROLL COUNTY, ILLINOIS

Elevation, 883 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1887	.....	.....	.....	.....	1.89	1.89	3.81	3.68	4.76	2.34	1.64	3.63	.....
1888	1.39	1.26	4.04	1.52	6.46	2.72	4.96	2.91	1.24	2.40	3.13	3.02	35.05
1889	1.66	1.17	1.49	3.87	3.55	3.17	6.42	.38	4.71	1.02	1.10	2.63	31.17
1890	2.76	1.61	2.13	.....	3.71	12.32	.78	2.96	1.36	5.43	1.87	.81	.....
1891	1.59	1.48	2.86	3.20	3.22	3.18	4.39	2.63	1.84	1.58	3.71	2.06	31.74
1892	2.13	1.83	2.97	6.05	9.29	9.57	.....	.....	.....	.....	.....	.....	.....
1893	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1894	.....	.....	.....	.....	.....	*3.00	*.33	*3.19	*6.49	*3.68	*1.60	*.63	.....
1895	*1.82	*.29	*.70	*.18	3.78	1.60	4.28	1.61	1.70	.86	2.02	1.41	20.25
1896	.49	1.02	1.21	5.05	7.92	2.92	5.06	3.23	4.78	1.97	.83	.95	35.43
1897	2.48	.89	3.20	2.67	1.24	5.58	1.06	.59	1.54	.39	1.79	1.46	22.89
1898	1.85	1.52	2.66	2.76	3.87	2.12	2.00	7.23	3.66	3.45	1.07	.34	32.53
1899	.27	2.00	1.31	2.12	7.74	2.72	3.66	1.67	1.33	2.67	1.75	1.73	27.17
1900	1.48	2.35	1.51	2.36	4.23	1.91	6.17	4.46	2.87	2.32	1.88	.72	32.26
1901	.90	.70	2.75	.66	2.72	1.87	1.15	.27	2.58	1.39	1.06	1.26	17.31
1902	.46	1.27	1.44	2.65	7.14	10.51	9.79	2.26	5.63	3.08	4.53	2.78	51.54
1903	1.06	1.90	2.94	4.02	5.05	1.88	9.09	6.26	5.64	2.02	1.06	1.71	42.63
1904	*.65	*.60	2.68	3.08	3.37	1.12	2.94	5.03	7.49	1.20	.17	2.65	30.98
1905	.57	1.26	3.06	2.41	4.06	3.15	4.01	7.90	2.62	4.29	2.16	.96	36.45
1906	2.60	1.79	2.44	2.17	4.18	5.24	4.32	6.05	3.70	1.95	3.48	1.71	39.63
1907	2.67	.22	1.51	2.50	3.23	4.48	3.72	5.13	6.20	1.42	1.41	.93	33.42
1908	.62	1.94	3.02	2.91	6.14	5.13	6.67	2.69	.89	1.16	3.02	.49	34.68
1909	3.58	1.67	1.14	7.23	2.46	6.40	1.53	1.92	1.81	1.64	4.37	2.57	36.32
1910	1.39	.40	.28	3.01	3.81	.71	1.34	3.26	2.37	.66	.71	.40	17.84
1911	.46	2.59	.71	4.48	4.58	3.81	3.42	12.19	6.89	1.45	3.98	1.49	46.05
Means	1.49	1.28	2.09	3.08	4.51	4.04	3.95	3.81	3.57	2.10	2.10	1.58	32.77

* Values are for Zion, in the same county.

LASALLE, LASALLE COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1901	.....	.....	.....	0.66	1.34	3.58	4.99	2.80	2.25	0.56	1.34	.....	.....
1902	0.35	1.75	3.57	2.30	4.36	8.90	10.70	.....	.....	1.67	3.05	.....	.....
1903	*.28	1.27	2.94	.....	.....	.....	.....	†4.95	6.27	1.02	.05	.33	.....
1904	1.96	.82	2.67	2.86	1.99	.....	.....	.....	.....	.....	.03	1.65	.....
1905	.90	1.09	1.83	3.71	5.51	4.43	1.49	3.19	3.15	1.86	1.93	1.28	30.37
1906	2.15	2.01	2.08	1.16	1.85	3.00	2.62	7.25	4.89	1.12	1.98	2.14	32.25
1909	1.28	3.06	1.40	5.93	3.05	2.33	2.52	4.00	3.15	1.53	3.82	3.64	35.71
1910	1.93	1.17	.19	3.78	6.02	.89	.79	3.74	5.09	1.03	.77	1.11	26.51
1911	1.78	2.16	1.31	3.37	1.97	3.32	3.16	6.45	7.42	2.40	2.26	2.04	37.64
Means	1.33	1.67	2.00	2.97	3.26	3.78	3.75	4.63	4.60	1.40	1.76	1.74	32.50

* Five days missing.
† Eleven days missing

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

LEBANON, ST. CLAIR COUNTY, ILLINOIS

Elevation, 500 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1859	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.82	4.31	.....
1860	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1861	1.15	3.20	4.94	2.15	5.99	4.33	1.27	3.54	3.25	3.06	.16	1.79	34.83
1862	4.10	1.73	2.52	6.00	3.74	4.74	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1875	.....	2.64	3.93	2.56	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	2.62	2.52	3.80	3.57	4.86	4.54	.....	.....	.....	.....	1.49	3.05	.....

LEXINGTON, M'LEAN COUNTY, ILLINOIS

Elevation, 800 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1895	1.23	0.21	1.06	3.42	1.23	2.29	9.16	2.89	5.87	0.76	2.80	6.83	37.75
1896	1.09	1.87	.53	3.62	6.22	4.58	7.18	5.47	.....	.....	.....	.15	.....
1897	5.67	2.51	4.01	2.70	1.68	1.59	6.38	.50	.70	.32	4.19	1.47	31.72
1898	4.62	2.11	5.17	2.13	*6.09	2.21	1.32	2.44	5.23	4.06	2.09	1.18	38.65
Means	3.15	1.68	2.69	2.97	3.80	2.67	6.01	2.82	3.93	1.71	3.03	2.41	36.04

* Ten days missing.

LINCOLN, LOGAN COUNTY, ILLINOIS

Elevation, 482 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1888	1.40	1.45	3.41	1.51	8.16	2.46	3.75	2.85	1.60	2.51	2.61	2.37	34.06
1889	1.72	1.88	1.61	.95	4.19	7.07	4.71	.30	4.81	1.70	4.10	1.50	34.54
1890	4.35	1.36	1.99	2.71	2.56	3.70	2.50	2.90	.80	2.90	1.10	.20	27.07
1891	1.69	4.51	3.20	3.46	1.05	3.36	3.25	6.06	.15	.73	4.52	1.43	33.41
1892	1.45	1.86	1.58	.....	.....	5.93	.....	.....	.....	.....	.....	.....	.....
1893	.....	.....	.....	.....	.....	3.41	2.05	.35	2.25	1.11	1.64	1.30	.....
1894	2.79	2.62	3.23	2.60	2.88	1.91	3.27	1.51	4.06	.81	1.50	2.43	29.61
1895	1.25	1.14	2.01	1.60	1.32	2.84	4.30	1.47	3.75	.31	2.67	7.42	30.08
1896	1.32	2.22	1.14	2.31	2.89	4.74	8.14	1.95	5.06	.43	1.95	.51	32.66
1897	5.19	1.50	3.82	2.98	1.47	4.17	3.10	1.42	1.21	.37	3.84	2.35	31.42
1898	4.78	2.20	9.90	2.47	5.04	3.71	.56	2.77	5.14	4.79	2.26	1.50	45.12
1899	1.21	2.13	2.86	.72	9.83	1.49	2.30	3.35	2.11	3.04	1.97	1.93	32.94
1900	.31	5.27	1.22	1.19	2.66	3.96	5.76	6.88	4.24	2.96	4.04	.68	39.17
1901	1.96	1.36	3.68	1.36	2.24	7.76	1.67	1.17	2.60	1.98	1.07	2.47	29.32
1902	.67	1.40	4.15	3.34	1.33	8.46	3.34	5.64	4.13	2.24	2.62	2.21	39.53
1903	1.18	3.06	1.42	5.10	4.09	1.98	2.24	3.13	3.07	3.67	1.19	1.70	31.83
1904	2.74	1.00	5.53	5.61	2.81	3.44	2.22	4.32	8.73	.50	.02	1.03	37.95
1905	2.05	1.37	1.53	3.99	3.23	2.11	3.64	1.41	3.33	2.80	1.34	1.74	28.55
1906	.....	2.10	2.90	2.45	2.30	2.12	.61	2.72	3.72	1.11	3.58	3.25	.....
1907	5.99	.24	.....	2.52	5.54	3.30	3.57	8.50	2.63	1.28	2.01	3.82	.....
1908	1.37	4.33	.....	4.95	8.77	1.64	1.96	2.77	.....	.49	1.44	1.69	.....
1909	2.29	1.84	1.55	5.04	.....	.....	.....	.....	.....	3.10	4.22	2.86	.....
1910	2.71	1.08	.47	3.56	5.97	1.33	2.99	.79	4.41	1.40	1.12	1.18	27.01
1911	2.45	1.91	2.32	3.76	1.79	2.43	1.57	2.97	14.31	2.49	1.59	2.31	39.90
Means	2.32	2.08	2.84	2.92	3.82	3.62	3.07	2.96	3.91	1.86	2.27	2.08	33.57

Values for 1888–1892, inclusive, are for Beason, eight miles from Lincoln.
Values for 1893–1905, inclusive, are for Mt. Pulaski, ten miles from Lincoln.

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

LOAMI, SANGAMON COUNTY, ILLINOIS
Elevation, 675 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1866	3.35	1.75	2.95	.95	3.10	2.80	4.23	2.05	6.55	4.50	0.40	1.70	34.33
1867	2.70	5.00	1.90	.45	5.40	2.60	1.55	2.50	.00	2.00	.....	.....	.....
1868	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.15	3.10	.....
1869	1.25	2.95	1.90	6.75	6.90	3.65	6.50	.50	1.90	1.91	.....	.....	.....
	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1895	.....	.....	.....	2.85	2.25	4.30	6.93	2.75	3.50	.35	3.17	8.00	.....
1896	.76	2.06	1.27	1.65	5.28	3.57	6.50	1.00	3.99	1.66	1.63	.22	29.59
1897	5.90	.90	4.11	4.27	3.27	4.31	4.41	2.09	.12	.24	4.93	2.73	37.23
1898	5.25	2.31	5.97	3.58	6.00	6.14	2.09	2.50	6.75	4.08	2.49	1.14	48.30
1899	.93	2.40	3.32	1.81	10.51	1.49	2.54	3.21	2.64	5.09	1.88	1.66	37.48
1900	.42	3.52	1.34	1.21	3.33	3.73	3.10	3.34	5.75	3.10	2.74	.36	31.94
1901	1.87	1.49	2.67	1.84	1.92	2.30	.27	1.69	1.47	1.69	1.05	2.77	21.03
1902	.70	1.06	2.96	2.79	2.10	7.79	2.38	4.69	4.02	2.49	2.90	1.86	35.74
1903	1.24	2.47	1.31	3.85	4.78	3.96	2.43	3.76	3.74	1.97	1.08	1.32	31.91
1904	2.44	1.35	4.65	4.46	3.21	4.76	4.01	3.65	3.47	.05	T	.68	32.73
1905	2.09	1.01	1.81	1.97	2.85	4.51	3.15	5.11	2.27	3.51	1.54	1.63	31.45
1906	2.94	2.09	3.41	2.03	4.81	2.42	.97	3.81	2.96	1.30	3.50	3.38	33.62
1907	6.45	.19	4.23	2.61	2.65	2.31	9.69	8.84	1.22	1.48	2.26	2.51	44.44
1908	1.35	4.12	2.61	3.74	6.34	1.89	6.08	2.01	1.83	1.07	1.73	1.80	33.57
1909	2.57	4.89	1.12	6.08	3.65	2.40	4.95	1.23	2.82	3.83	4.14	1.31	38.99
1910	1.75	.85	T	2.80	5.55	2.34	3.13	.70	5.35	1.94	1.65	.75	26.81
1911	2.89	1.67	1.63	3.96	1.67	1.16	2.16	4.48	15.89	1.92	3.25	2.39	43.07
Means	2.46	2.21	2.59	2.98	4.28	3.42	3.85	3.00	3.81	2.21	2.39	2.07	34.33

LOUISIANA, PIKE COUNTY, MISSOURI
Elevation, 500 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1878	1.32	3.15	4.52	3.04	6.01	1.05	3.40	1.65	1.00	2.15	1.40	2.55	31.24
1879	.95	.35	1.18	3.40	.92	1.70	2.10	2.45	1.65	2.05	3.20	1.60	21.55
1880	.80	1.45	1.72	1.24	6.37	5.50	1.10	2.85	1.45	.90	1.90	1.40	26.68
1881	.00	3.70	4.95	1.10	1.37	7.40	1.00	.00	3.65	8.95	3.95	3.40	38.47
1882	1.65	6.55	3.27	2.82	4.05	7.42	1.80	2.17	1.55	4.72	2.87	2.15	41.02
1883	1.65	5.75	1.35	1.60	4.27	9.75	2.75	1.35	.19	3.92	1.82	.61	35.01
1884	1.06	3.70	2.35	1.07	3.36	4.86	5.28	3.55	7.60	1.82	1.30	3.20	39.15
1885	2.88	1.00	.10	6.00	2.95	4.39	1.75	*5.00	*4.50	1.32	1.35	1.14	32.38
1886	1.63	.31	.67	2.03	2.36	3.46	.02	5.04	7.24	.50	.85	.47	24.58
1887	1.41	2.97	1.45	2.70	3.15	1.97	1.37	1.28	3.17	.41	2.15	3.62	25.65
1888	1.76	1.37	3.09	.69	5.10	5.64	2.34	5.05	1.94	1.10	3.90	2.45	34.43
1889	*2.00	*2.25	*1.60	3.44	6.30	2.84	2.23	1.05	4.23	2.52	2.74	1.33	32.53
1890	3.37	1.14	2.16	1.77	2.94	2.78	.48	1.67	2.36	3.07	1.45	.20	23.39
1891	.54	2.28	1.76	2.61	1.87	4.40	4.94	2.67	1.15	1.44	2.54	.64	26.84
1892	1.11	3.74	1.73	4.58	8.50	3.31	4.41	2.11	4.12	.32	2.79	1.57	38.29
1893	.00	1.60	2.45	7.77	5.07	3.84	2.70	.35	1.55	.51	1.06	.13	27.03
1894	1.69	2.08	2.30	2.17	5.08	2.83	.82	3.28	3.14	1.08	1.28	1.96	27.71
†1895	1.30	.60	2.27	1.73	3.76	2.82	9.22	5.03	3.14	.74	2.78	7.93	43.32
†1896	2.44	2.27	1.46	3.03	9.65	6.09	9.83	2.29	3.34	2.20	1.83	.73	45.16
†1897	7.06	2.22	5.08	4.78	3.04	7.52	9.97	1.48	.75	.69	3.57	2.44	48.60
1898	3.85	1.82	4.91	4.38	7.83	7.15	4.66	1.34	4.66	2.41	3.19	1.58	47.78
1899	.87	1.93	3.03	1.62	8.77	2.23	4.20	6.85	3.56	3.34	2.77	1.65	40.82
1900	1.83	5.45	1.51	1.64	4.24	2.56	2.72	2.53	4.32	4.08	1.53	.34	32.75
1901	2.25	1.49	3.73	2.15	1.16	*2.71	*2.51	*1.11	*.55	*1.79	*1.45	3.58	24.48
1902	1.50	1.57	3.42	2.93	4.93	7.68	5.06	5.23	3.62	3.06	3.26	2.99	45.25
1903	1.97	3.91	3.91	3.83	3.34	3.61	2.47	4.02	5.99	1.73	1.09	.95	36.82
1904	3.91	1.59	4.62	6.04	4.91	4.14	3.42	6.23	5.37	.40	.28	1.04	41.96
1905	2.36	1.49	1.34	2.76	2.51	1.21	3.15	3.82	6.59	4.55	1.50	1.57	32.85
1906	3.09	3.08	3.24	2.72	3.33	3.61	.94	2.52	4.83	1.17	2.92	2.83	34.28
1907	5.55	.70	4.04	2.74	3.81	4.03	6.34	5.40	.96	2.24	1.52	1.68	39.01
1908	.81	3.15	2.48	2.82	5.36	3.49	5.42	3.31	2.08	.75	1.63	1.50	33.10
1909	3.33	4.83	2.20	5.13	6.59	2.22	4.62	.51	6.42	6.69	3.77	2.36	48.67
1910	1.97	1.56	.20	2.82	7.34	1.92	10.92	1.85	6.87	1.08	1.07	.84	38.44
1911	3.02	3.02	2.86	5.03	1.25	2.56	2.73	3.47	8.38	3.44	1.95	2.09	39.80
Means	2.11	2.48	2.52	3.06	4.45	4.08	3.73	2.89	3.58	2.27	2.20	1.90	35.27

* Values derived from surrounding stations.

† Values for November 1895-November 1897, inclusive, are for McCunes station about ten and one half miles west of Louisiana.

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

M'LEANS ORO, HAMILTON COUNTY, ILLINOIS

Elevation, 462 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1882	2.99	4.97	3.22	2.86	6.27	3.93	3.06	7.85	3.99	2.82	2.77	2.60	47.33
1883	2.30	8.27	3.32	3.19	5.20	9.13	3.14	2.54	.....	9.28	6.64	3.50	56.51
1884	2.15	3.87	2.55	2.96	2.80	5.27	1.78	2.70	3.80	1.92	1.88	8.24	39.92
1885	4.20	1.10	.89	2.22	2.51	4.83	1.74	3.67	6.02	3.66	2.56	3.50	36.90
1886	3.51	2.75	4.10	4.14	4.92	3.82	1.28	2.61	2.50	.70	6.69	2.69	39.71
1887	.98	3.94	3.10	3.43	3.35	3.45	3.05	.19	1.45	.77	3.08	3.29	30.08
1888	2.81	1.57	4.77	1.48	2.79	5.83	2.18	7.76	1.06	2.28	4.88	2.47	39.88
1889	3.20	2.36	1.95	.88	2.80	*5.00	4.31	3.02	4.33	1.52	5.74	1.77	36.88
1890	7.12	5.23	5.94	4.03	4.10	2.10	5.53	7.05	4.69	1.13	*2.20	1.38	50.50
1891	*3.30	*4.50	2.08	*2.50	1.92	3.59	1.29	8.51	.78	.55	5.20	2.35	36.57
1892	1.43	3.44	.93	7.50	6.92	2.30	1.85	3.97	*.50	2.11	4.25	.98	36.18
1893	1.12	3.55	3.25	6.02	5.96	4.54	1.89	2.12	2.44	2.35	2.48	1.51	37.23
1894	2.35	2.88	3.01	3.38	5.33	1.12	.98	.....	.....	.....	.....	.....	.....
1895	.....	.....	.....	2.22	1.99	7.62	7.11	2.03	3.00	.57	5.57	2.85	.....
1896	1.47	2.24	4.51	2.00	7.06	4.55	4.38	1.29	3.91	1.73	2.39	.70	36.23
1897	4.23	4.00	11.29	7.27	2.53	5.52	3.43	1.70	.63	.45	5.85	5.12	52.02
1898	4.98	1.29	11.11	5.38	6.05	4.99	3.57	5.15	2.75	3.77	1.26	1.69	51.99
1899	4.96	2.61	4.33	1.95	3.82	4.91	5.16	3.14	2.02	4.03	2.46	2.36	41.75
1900	1.24	3.52	*2.00	2.08	5.34	6.13	4.45	.63	3.07	1.53	3.97	1.25	35.21
1901	1.41	2.10	3.79	2.73	1.06	2.39	2.87	2.65	.94	2.33	1.36	5.20	28.83
1902	1.93	.96	3.83	2.18	3.30	2.68	2.21	2.71	2.44	.85	3.65	5.27	32.01
1903	2.21	4.86	3.72	3.75	3.38	4.09	1.31	3.90	1.71	2.96	.98	2.20	35.07
1904	3.78	3.49	8.89	3.93	3.32	4.67	5.48	2.12	10.11	.40	.94	3.17	50.30
1905	2.61	1.55	2.61	4.25	3.49	1.81	7.39	3.30	3.03	4.01	2.66	3.46	40.17
1906	6.20	2.74	5.38	1.46	.50	2.89	1.92	4.35	5.43	1.76	5.32	6.01	43.96
1907	7.72	.91	2.97	2.16	3.61	2.89	1.62	5.80	1.03	1.96	3.83	4.12	38.62
1908	2.35	7.55	4.45	7.10	6.60	.65	2.83	2.17	.41	T	3.23	1.33	38.67
1909	3.08	6.63	4.13	6.55	3.66	3.13	6.34	.31	3.72	1.52	3.44	5.38	46.09
1910	3.09	3.09	T	2.45	2.96	3.13	3.57	2.57	5.03	7.84	.56	2.06	36.35
1911	.84	2.72	1.51	7.57	.86	2.71	1.62	2.17	6.19	1.87	3.07	2.48	34.61
Means	3.09	3.40	3.92	3.66	3.81	3.99	3.17	3.37	3.08	2.30	3.46	3.06	40.34

* Interpolated from surrounding stations.

MAGNOLIA, PUTNAM COUNTY, ILLINOIS

Elevation, 500 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1866	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.31	3.91	.....
1867	3.00	4.50	3.33	2.00	10.00	5.70	.....	.....	.....	.....	.....	.....	.....
1868	1.78	.80	6.50	4.70	7.80	3.70	2.40	2.70	.....	.....	.....	.....	.....
Means	2.39	2.65	4.92	3.35	8.90	4.70	.....	.....	.....	.....	.....	.....	.....

MAHOMET, CHAMPAIGN COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1887	.....	.....	.....	.....	.....	.....	.....	3.32	.....	1.34	2.96	4.05	.....
1888	3.02	1.85	.....	.....	7.84	4.36	5.38	.....	.....	.....	3.11	2.04	.....
1889	1.67	1.53	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	2.34	1.69	.....	.....	.....	.....	.....	.....	.....	.....	3.04	3.04	.....

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

MAKANDA, JACKSON COUNTY, ILLINOIS

Elevation, 765 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1886	3.39	1.30	9.15	4.73	1.26	.....	.....	1.80	1.88	0.36	6.43	2.19	.....
1887	3.01	9.83	.....	5.20	.....	.....	.....	.....	.....	.....	.....	.....	.....
1888	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1889	3.75	3.95	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	3.38	5.03	.....	4.96	.....	.....	.....	.....	.....	.....	.....	.....	.....

MANCHESTER, SCOTT COUNTY, ILLINOIS

Elevation, 683 feet

Year	Jan.	Feb	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1854	.....	.....	.....	.....	.....	.....	1.01	3.30	.....	5.28	1.02	1.19	.....
1855	13.53	1.56	2.91	3.97	6.43	2.00	3.52	2.06	2.76	2.55	2.82	3.92	48.03
1856	1.10	4.69	1.55	1.23	4.32	1.93	2.11	2.11	1.11	2.46	3.43	4.98	31.02
1857	.85	6.91	2.62	.77	2.73	3.84	2.28	4.52	2.39	1.67	3.83	1.35	33.76
1858	2.35	1.67	2.05	3.65	9.20	7.60	6.52	2.18	4.59	4.29	2.86	2.45	49.41
1859	2.06	2.48	4.15	3.62	10.76	5.50	2.70	2.81	2.85	1.22	2.92	1.30	42.37
1860	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1861	1.33	2.29	6.19	2.18	3.37	4.52	1.59	1.52	2.83	2.27	.94	1.00	30.03
1862	5.15	.72	2.66	7.05	2.56	2.32	5.34	1.70	4.69	1.77	2.30	3.57	39.83
1863	2.89	4.01	3.77	.....	1.80	.89	3.73	1.97	2.79	3.93	1.77	3.36	30.91
1864	3.12	.87	2.05	4.34	2.01	1.12	2.02	1.87	2.42	1.97	3.67	1.94	27.40
1865	.25	5.23	4.58	.....	.....	.....	.....	.....	.....	.....	.....	1.63	.....
1866	3.74	4.03	3.11	4.16	4.95	1.22	4.01	2.89	7.08	5.98	.50	2.03	43.70
1867	1.60	6.34	1.95	.47	5.45	3.36	2.83	2.50	.50	1.42	1.60	1.01	29.03
1868	1.19	.19	6.81	5.60	5.59	3.22	1.70	3.02	3.89	1.43	3.12	2.25	38.01
1869	3.67	1.97	2.43	6.25	4.38	4.82	6.98	1.86	.94	1.67	2.89	2.87	40.73
1870	1.16	.35	4.61	1.95	1.59	2.60	4.55	5.22	2.61	2.43	1.65	2.30	31.02
1871	3.50	1.55	4.40	.95	2.48	1.95	1.40	.80	.08	3.10	3.05	2.70	25.96
1872	.68	2.95	3.60	2.30	1.93	9.93	6.00	3.64	2.83	.00	1.07	1.55	36.48
1873	5.01	2.50	1.80	5.75	7.26	3.05	2.85	1.81	3.89	2.83	3.15	.....	.....
1874	2.36	3.19	2.75	3.30	2.75	1.90	3.00	5.60	3.15	.....	.....	.....	.....
Means	2.92	2.82	3.37	3.38	4.42	3.43	3.37	2.70	2.86	2.57	2.37	2.30	36.11

MARTINSVILLE, CLARK COUNTY, ILLINOIS

Elevation, 630 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1877	.....	1.08	4.14	3.36	3.28	7.00	3.75	7.84	2.07	2.96	4.60	2.54	.....
1878	2.20	2.64	2.27	8.42	6.43	2.46	3.58	.....	.....	.....	.....	.....	.....
1885	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	.....	.....	2.65	2.79	.....	.....	4.55	3.26	6.40	1.25	4.90	3.56	.....
1887	1.85	5.20	4.15	3.16	5.65	1.39	2.54	3.59	2.35	1.02	5.25	3.00	39.45
1888	.....	1.25	2.22	2.75	.....	5.26	.....	6.71	1.36	1.13	7.30	.....	.....
1889	1.01	1.08	.99	.27	4.20	7.65	3.00	1.30	5.00	3.34	4.67	.91	33.42
1890	6.19	5.98	3.34	3.46	3.57	3.68	3.00	4.24	4.60	1.45	2.25	1.34	43.10
1891	2.23	4.67	3.93	1.35	.72	1.55	.79	6.55	1.12	1.09	3.61	.99	28.60
1892	1.60	1.80	.....	7.84	6.83	2.65	2.62	3.27	.77	.83	3.20	1.12	.....
1893	1.25	4.42	3.99	9.16	4.76	3.15	.85	.54	4.18	1.30	3.14	2.11	38.85
1894	2.43	2.83	2.20	3.72	4.37	1.10	3.44	3.45	1.70	1.20	.98	3.49	30.91
1895	2.56	.95	1.20	3.43	1.10	1.54	4.71	3.83	2.48	.95	4.75	4.30	31.80
1896	.85	1.80	1.90	1.92	3.37	3.23	10.57	2.83	4.30	.95	3.27	1.41	36.40
1897	4.15	2.50	7.27	5.72	3.47	6.77	2.30	.25	.47	.69	6.01	2.83	42.43
1898	3.86	1.26	9.64	2.48	2.79	4.20	1.15	3.44	4.90	4.35	2.29	.85	41.21
1899	1.80	1.38	4.05	1.20	5.20	2.25	4.51	2.70	.69	2.79	1.79	2.55	30.91
1900	.23	*2.66	*1.56	*.75	*4.58	*5.07	*5.53	*3.37	*4.23	*2.15	*2.96	*.72	33.81

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

MARTINVILLE, CLARK COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1901	*.57	*.80	*1.28	.....	.....	†6.41	†.43	1.56	†.42	2.40	†1.10	3.93	.....
1902	.....	.....	†1.97	2.49	2.87	6.48	4.28	4.57	3.78	1.39	.....	.....	.....
1903	.....	.....	.....	3.81	.85	2.54	3.06	4.50	2.93	2.28	1.55	.....	.....
1904	3.57	.55	7.97	.95	3.55	4.61	3.20	2.25	5.01	.60	.25	.....	.....
1905	1.81	.....	1.52	4.01	5.41	1.55	5.64	.....	2.00	4.99	2.70	1.75	.....
1906	3.85	1.55	3.55	2.40	1.65	5.07	2.74	5.43	3.65	.80	4.65	4.70	40.04
1907	7.57	.09	1.90	2.45	5.08	4.86	4.98	3.85	.40	2.65	3.40	2.20	39.43
1908	.20	3.25	3.90	3.60	11.35	3.17	2.67	1.14	1.87	.21	3.72	1.23	36.31
1909	2.76	3.10	1.65	6.47	6.99	6.61	9.43	1.03	2.88	3.19	4.65	3.03	51.79
1910	1.33	2.20	.40	2.42	4.63	2.15	7.74	2.89	2.30	6.10	3.10	1.15	36.41
1911	3.20	2.35	4.15	6.07	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	2.48	2.31	3.23	3.58	4.29	3.94	3.89	3.37	2.72	2.00	3.44	2.26	37.35

* At Weir, seven miles distant.
† At Melrose, ten miles distant.

MARTINTON, IROQUOIS COUNTY, ILLINOIS

Elevation, 633 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
†1885	.....	.....	.....	.....	.....	3.10	3.75	2.11	4.45	6.65	1.36	4.02	.....
†1886	2.06	1.78	2.04	2.33	5.38	3.40	3.06	3.75	5.23	.62	1.49	1.42	32.56
†1887	1.21	5.03	1.02	2.17	1.95	2.05	2.12	3.37	2.74	1.65	2.90	4.11	30.32
†1888	2.82	1.50	2.53	2.11	4.96	4.43	2.49	.61	.50	2.36	3.20	1.92	29.43
†1889	1.39	1.70	1.65	1.28	6.40	5.65	6.54	2.01	2.71	2.68	3.15	1.53	36.69
†1890	4.79	1.77	3.28	3.86	5.37	5.78	1.57	2.70	2.08	3.73	1.56	.....	.....
†1891	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
†1892	.....	.....	2.27	7.33	9.47	3.98	1.35	2.42	2.51	.52	1.95	1.44	.....
†1893	1.85	6.70	3.15	6.95	5.42	1.35	.....	.....	.....	.....	.....	.....	.....
*1894	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.78	1.73	.....
*1895	.87	T	.53	3.03	1.35	1.29	5.09	1.93	3.46	1.17	2.80	7.91	29.43
*1896	*1.30	*1.94	*.89	3.14	3.25	4.42	7.02	3.62	5.50	.25	1.98	.13	33.44
1897	3.61	1.37	3.96	2.26	1.78	4.44	1.67	1.28	.29	.61	5.71	2.20	29.18
1898	3.44	1.90	4.38	1.98	5.66	2.65	1.11	4.03	5.77	4.36	2.81	1.80	39.89
1899	1.37	.89	2.14	.20	4.02	2.22	2.55	2.19	2.30	3.17	1.84	3.11	26.00
1900	.74	4.56	3.52	1.31	4.22	2.33	4.34	5.10	2.09	1.82	5.78	.52	36.33
1901	1.55	1.30	4.06	1.37	2.19	4.76	1.85	3.15	1.82	2.90	1.10	3.10	29.15
1902	.83	1.81	4.14	3.36	4.51	12.53	6.29	2.37	6.84	1.72	3.37	2.91	50.68
1903	1.29	2.00	1.28	7.18	4.67	3.33	4.34	3.88	2.40	2.54	.79	.29	33.99
1904	2.02	1.60	4.08	3.26	3.92	1.68	2.03	3.24	4.81	1.23	.09	1.85	29.81
1905	.81	2.05	1.79	3.96	8.93	4.38	2.68	4.91	2.77	2.10	2.68	1.60	38.66
1906	3.26	1.77	3.54	2.03	4.25	3.17	6.02	7.19	4.59	1.80	3.25	3.40	44.27
1907	4.57	.20	5.23	2.56	2.86	4.04	5.65	6.62	4.17	.65	2.70	4.68	43.93
1908	1.75	4.05	2.79	4.30	9.95	1.65	1.24	2.86	2.60	.67	1.58	2.08	35.52
1909	2.30	4.39	2.00	4.90	2.95	4.27	2.45	7.31	3.82	3.35	5.53	4.10	47.37
1910	2.55	1.07	.45	2.27	4.47	1.25	4.36	5.80	4.50	2.87	.26	1.16	31.01
1911	1.43	1.06	1.50	4.12	5.79	1.90	.80	2.65	9.40	2.99	2.00	1.86	35.50
Means	2.08	2.20	2.60	3.22	4.74	3.60	3.35	3.54	3.65	2.19	2.45	2.45	35.39

† Values 1885–1893, inclusive, are from Watseka, nine miles distant.
* Values November, 1894–March, 1896, inclusive, are for Gilman, sixteen miles distant.

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

MASCOUTAH, ST. CLAIR COUNTY, ILLINOIS

Elevation, 425 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1882	3.50	7.25	5.00	2.65	4.75	5.81	5.12	2.37	4.25	3.66	5.74	2.37	52.47
1883	1.55	12.25	3.00	3.25	6.20	6.70	5.60	3.20	.....	7.60	3.50	2.10	.....
1884	1.42	6.70	5.60	5.30	7.70	5.50	1.40	1.60	3.80	1.60	3.40	6.90	50.92
1885	1.10	.71	.44	6.30	2.30	8.10	5.00	4.20	7.10	6.60	3.10	3.74	48.69
1886	3.51	2.59	3.81	6.80	5.90	4.90	1.20	2.90	6.90	.70	4.92	2.50	46.63
1887	1.58	4.70	4.80	3.40	3.80	1.50	3.50	1.20	2.70	1.50	5.50	4.20	38.38
1888	2.70	3.10	3.80	1.50	4.80	8.70	1.30	5.60	1.40	3.30	3.20	†2.03	41.43
1889	2.65	*4.80	.80	2.20	4.90	5.00	6.40	1.30	4.20	2.40	4.80	1.60	41.05
1890	10.00	4.70	4.62	8.20	2.80	3.20	.30	1.90	5.30	†.85	2.60	1.30	45.77
1891	1.65	3.13	3.07	2.50	2.60	5.30	.70	7.40	1.90	1.30	6.40	1.40	37.40
1892	2.70	3.00	2.45	9.20	7.70	6.20	3.50	1.10	1.40	1.40	3.60	1.55	43.80
1893	.74	2.43	3.50	10.20	4.20	2.80	2.50	1.30	5.70	3.00	1.60	.60	38.57
1894	1.17	2.21	2.40	3.50	4.40	1.70	2.00	1.50	4.50	.80	.40	3.63	28.21
1895	3.36	1.76	2.19	1.60	3.20	2.10	4.80	1.70	1.90	.50	3.75	5.75	32.61
1896	1.54	2.41	2.89	2.30	9.70	5.20	3.80	1.40	5.80	1.90	4.20	.10	41.24
1897	4.71	3.59	9.91	3.64	2.27	4.83	3.27	.14	1.00	.40	4.68	2.73	41.17
1898	4.03	2.89	11.33	4.21	6.84	5.62	4.84	5.57	3.80	4.42	2.43	1.48	57.46
1899	2.70	3.45	2.88	1.95	5.56	3.59	1.94	2.12	.65	3.36	3.50	3.41	35.11
1900	.40	3.99	3.40	1.80	5.50	5.17	2.65	1.47	3.32	1.99	3.84	1.44	34.97
1901	1.61	2.55	3.10	2.81	4.19	3.10	.76	.73	1.80	2.76	1.44	3.53	28.38
1902	1.36	.83	4.78	2.70	3.15	5.00	2.59	4.40	2.52	1.55	3.53	3.75	36.16
1903	1.76	4.74	2.34	3.54	2.12	3.92	3.83	3.30	2.83	3.45	1.58	1.44	34.85
1904	3.15	1.71	7.78	4.11	3.25	6.90	5.05	7.50	4.25	.88	.70	1.52	46.80
1905	3.37	1.84	2.89	5.69	4.66	1.64	6.07	1.77	6.66	6.14	2.90	2.23	45.86
1906	4.28	3.35	6.22	2.00	1.50	3.04	.90	2.33	5.12	1.85	.....	.....	.....
1907	.....	.....	.....	3.85	8.19	3.33	3.61	4.50	1.74	2.82	2.76	3.45	.....
1908	1.84	5.44	3.30	5.91	10.67	3.85	4.73	2.70	.81	.11	3.28	.61	43.25
1909	3.04	4.13	4.40	5.62	4.48	2.90	7.63	.07	4.16	3.22	4.56	2.68	46.89
1910	2.33	3.68	.02	4.62	5.22	6.42	5.90	5.08	7.84	4.54	.17	1.51	47.33
1911	.76	2.89	2.24	6.41	1.68	1.82	1.58	3.70	5.85	3.51	2.68	2.00	35.12
Means	2.57	3.69	3.90	4.26	4.81	4.46	3.42	2.81	3.76	2.61	3.27	2.46	41.50

* Interpolated from surrounding stations.
† For Collinsville, sixteen miles distant.

MATTOON, COLES COUNTY, ILLINOIS

Elevation, 744 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1869	.....	.....	.....	.....	.....	.....	.....	5.01	.....	.....	.....	.....	.....
1870	1.76	.92	3.00	1.62	2.62	3.37	2.37	3.81	1.44	3.50	3.00	3.38	30.79
1871	4.75	3.00	.....	.....	.....	9.37	7.70	4.00	1.25	5.00	.....	.....	.....
1872	1.03	5.73	5.00	12.70	18.25	10.50	.....	.....	.....	.....	.....	.....	.....
1873	7.88	9.86	7.95	10.20	.....	.....	.....	.....	4.75	1.75	.88	6.00	.....
1874	2.75	4.30	.....	5.00	.88	3.50	5.50	5.50	2.50	.88	2.90	.....	.....
1875	3.00	2.75	2.50	1.75	4.88	6.25	10.06	2.25	2.62	1.75	.88	2.75	41.44
1876	4.50	4.25	3.50	2.62	5.76	.....	.....	.....	.....	.....	.....	.....	.....
1880	6.38	6.37	6.00	6.00	7.00	2.75	3.00	3.38	2.50	2.10	2.50	2.70	50.68
1881	1.45	5.25	3.90	2.00	1.38	5.75	.50	.87	4.50	11.25	8.12	3.63	48.60
1882	3.00	9.00	6.10	4.42	6.85	5.94	2.07	5.94	1.70	3.00	2.74	2.26	53.02
1883	.91	8.20	1.28	3.03	4.14	3.94	4.64	1.78	.80	9.40	4.73	2.26	45.11
1884	.90	5.44	2.75	4.16	5.00	6.87	3.65	2.20	4.70	2.80	1.83	5.45	45.75
1885	2.47	.65	.58	6.20	6.38	5.70	3.80	7.80	5.30	4.60	2.20	3.00	49.68
1886	2.80	1.10	3.55	2.30	4.98	3.67	2.60	3.30	4.73	1.05	2.65	1.88	34.61
1887	1.30	4.25	3.20	2.90	4.72	1.03	1.30	3.23	3.10	.97	6.81	4.10	36.94
1888	2.65	2.25	3.20	2.15	5.90	8.25	2.25	3.48	1.48	2.44	4.30	2.25	40.60
1889	1.85	.59	1.40	1.00	5.33	6.30	7.90	1.87	3.13	2.00	5.00	2.25	38.62
1890	.....	.....	.....	.....	.....	2.50	2.70	.....	.....	2.05	.25	1.00	.....
1891	1.10	2.97	4.70	2.30	.60	4.25	1.88	1.95	1.25	1.40	4.40	1.90	31.70
1892	1.20	1.80	2.20	8.95	8.15	2.65	3.60	1.15	1.20	.85	4.75	.90	37.40
1893	1.08	2.71	.....	.....	4.60	2.00	4.35	1.21	3.37	*.20	2.60	.59	.....
1894	1.53	†1.46	3.33	1.81	†1.02	2.25	3.84	2.23	4.60	.39	3.24	1.72	27.42

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

MATTOON, COLES COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1895	.57	.71	1.04	2.36	.73	2.86	3.37	||3.20	||2.75	.60	2.61	3.36	24.16
1896	.80	1.68	1.13	1.04	5.39	5.68	10.07	3.04	6.11	.49	2.81	.88	39.12
1897	4.05	1.88	4.36	6.38	1.98	5.11	3.63	.40	1.23	.30	4.73	2.65	36.70
1898	3.34	1.58	7.15	4.01	4.96	2.30	1.66	2.79	4.49	4.33	2.02	1.88	40.51
1899	2.29	2.09	2.72	.85	7.41	2.38	1.64	4.10	1.02	3.18	§2.03	2.71	32.42
1900	.51	3.59	2.13	1.04	4.02	5.43	4.76	7.07	4.86	3.00	5.24	2.02	43.67
1901	1.85	.90	2.48	2.18	2.97	5.95	1.20	1.07	1.46	3.45	2.14	3.63	29.28
1902	1.15	1.95	4.96	6.11	11.00	14.83	1.26	3.09	1.97	1.53	2.22	2.77	52.84
1903	.99	1.95	2.01	4.16	1.14	3.12	5.39	6.73	2.33	1.29	1.06	2.78	32.95
1904	3.18	1.26	7.88	2.77	3.72	2.28	6.76	3.95	4.51	.17	.08	.83	37.39
1905	1.20	.87	1.69	2.08	4.98	.55	5.74	1.16	1.29	4.05	1.57	1.73	26.91
1906	2.71	1.22	5.64	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1907	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	2.33	3.11	3.58	3.80	4.89	4.75	3.97	3.35	2.90	2.57	3.01	2.52	38.79

|| Estimated from surrounding stations.
* Thirteen days missing.
† Seven days missing.
‡ Eight days missing.
§ Three days missing.

MELVIN, FORD COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1885	.....	.....	.....	.....	.....	.....	.....	2.25	3.60	5.50	1.95	3.20	.....
1886	1.89	2.45	2.08	2.40	4.45	4.00	2.50	1.65	5.30	.70	1.80	1.60	30.82
1887	1.40	4.10	.90	3.20	2.70	2.75	2.20	2.90	2.50	1.10	.....	.....	.....
Means	1.64	3.28	1.49	2.80	3.58	3.38	2.35	2.27	3.80	2.43	1.88	2.40	.....

MINONK, WOODFORD COUNTY, ILLINOIS

Elevation, 745 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1886	1.70	0.46	2.95	3.20	4.22	3.45	0.60	0.65	4.95	1.60	0.70	1.05	25.53
1887	.85	4.95	.75	1.50	2.10	.25	.92	2.60	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1895	.....	.....	.....	.....	.....	.....	.....	.....	.....	.87	4.03	6.33	.....
1896	1.26	1.44	1.08	3.64	5.50	3.87	5.33	2.67	4.53	.20	2.32	T	31.84
1897	5.14	1.45	3.18	2.93	1.05	2.57	2.93	.92	1.90	.13	3.92	1.20	27.32
1898	4.21	1.78	5.00	2.87	6.84	2.92	.58	4.76	5.47	3.86	2.13	1.04	41.46
1899	.50	1.79	2.24	1.58	4.59	3.75	2.19	1.74	4.20	3.47	.95	2.31	29.31
1900	1.30	4.45	3.02	1.16	3.09	1.40	2.21	6.43	2.54	2.24	2.66	.37	30.87
1901	1.49	1.31	3.60	.61	2.41	2.50	2.40	.75	1.92	.75	.78	1.87	20.39
1902	.48	1.41	3.89	2.23	2.43	9.41	7.76	8.56	4.59	1.59	3.15	1.79	47.29
1903	.71	2.16	2.80	4.65	3.23	4.12	6.24	4.49	7.14	2.23	.92	1.47	40.16
1904	2.51	1.48	3.95	2.75	3.70	1.61	6.23	2.69	4.14	.17	T	1.43	30.66
1905	1.16	1.06	1.97	3.88	4.54	3.35	2.07	2.59	2.64	2.10	1.68	1.42	28.46
1906	1.89	1.43	1.95	.92	1.62	2.46	1.66	2.51	4.37	1.50	2.04	1.99	24.34
1907	3.99	.06	1.72	2.59	4.14	4.19	5.72	3.91	3.82	.44	1.89	2.46	34.93
1908	.80	3.83	2.42	4.06	8.77	1.21	1.88	1.62	.39	.69	1.60	.67	27.94
1909	1.62	3.50	1.68	5.62	2.56	3.31	1.98	3.32	1.98	2.43	3.83	2.90	34.73
1910	1.45	1.08	.03	3.63	4.52	4.07	1.31	2.46	3.91	.93	.33	1.16	31.19
1911	2.06	1.80	2.43	3.39	1.32	3.02	2.87	3.49	10.13	3.75	2.11	2.47	38.84
Means	1.84	1.97	2.50	2.84	3.70	3.20	3.05	3.17	4.04	1.61	1.95	1.77	32.07

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

MONMOUTH, WARREN COUNTY, ILLINOIS

Elevation, 784 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1881	1.39	3.90	3.80	1.70	1.29	11.82	2.86	2.33	3.50	7.48	2.17	1.86	44.10
1882	1.00	1.15	3.66	2.93	7.00	9.92	4.12	2.57	1.24	4.40	1.60	1.38	40.97
1883	1.80	2.72	1.15	2.44	5.32	6.55	5.66	1.11	1.07	4.94	3.28	.95	36.99
1884	1.06	1.16	3.01	1.48	3.79	5.07	4.06	2.91	.....	.....	.....	.....	.....
1885	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	.....	.....	2.58	1.70	.....	.....	.....	.....	.....	.....	.....	.....	.....
1887	1.72	6.50	1.30	.....	.....	.....	.....	.....	.....	.....	1.30	1.61	.....
1888	3.01	.....	.....	.....	.....	.....	5.20	.....	3.43	.....	1.30	.....	.....
1889	.....	2.40	.....	.....	.....	.....	.....	.....	.....	2.28	.....	.....	.....
1890	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1893	.....	2.24	3.48	.....	.....	.....	.....	.....	.....	.....	.....	1.57	.....
1894	1.78	1.35	2.22	2.10	2.10	2.04	1.02	2.00	5.61	1.16	1.52	1.49	24.39
1895	1.42	.18	.84	2.54	2.04	2.97	5.50	3.04	4.26	.78	2.06	4.81	30.44
1896	1.10	1.35	.68	4.50	4.76	3.56	5.79	6.68	6.02	1.76	.81	.35	37.36
1897	5.14	.82	2.63	3.25	.94	2.00	5.26	.65	2.78	.13	1.87	1.69	27.16
1898	3.20	1.38	3.65	2.73	6.60	4.67	1.50	9.23	7.15	2.34	1.53	.47	44.45
1899	.37	1.49	3.10	2.84	6.61	1.24	1.49	3.27	2.26	2.38	.65	1.43	27.13
1900	1.67	2.92	2.10	1.01	2.93	.82	2.65	4.23	5.31	2.86	2.39	.25	29.14
1901	1.24	1.19	2.00	1.23	1.28	4.96	5.44	.37	3.00	1.03	.87	.78	23.39
1902	.30	.99	3.03	3.13	3.65	13.97	7.51	8.80	3.48	3.39	2.28	2.56	53.09
1903	.63	1.66	2.11	6.58	3.63	2.27	1.92	6.32	6.57	2.35	.72	.66	35.42
1904	2.85	.80	3.62	2.51	4.61	2.86	8.66	5.63	4.29	.36	.22	1.67	38.08
1905	.83	2.04	1.77	4.98	3.64	3.87	2.89	2.04	1.19	1.56	2.16	1.40	28.37
1906	3.29	2.12	3.77	2.28	3.11	4.14	2.73	1.98	8.98	2.30	2.67	1.76	39.13
1907	4.72	.27	2.02	3.19	2.79	2.72	7.32	5.27	1.76	.74	1.46	1.49	33.75
1908	1.27	3.33	3.08	2.41	11.29	5.21	5.12	3.98	1.56	1.40	3.08	.87	42.60
1909	1.54	3.06	2.02	3.92	3.34	3.99	5.06	.38	3.68	3.77	5.98	3.88	40.62
1910	1.92	1.51	.73	2.91	4.66	1.97	2.62	.37	2.80	.86	.48	1.13	21.96
1911	2.53	3.51	2.25	4.12	1.53	2.05	4.12	1.70	20.03	2.38	3.00	1.90	49.12
Means	1.90	2.00	2.43	2.89	3.90	4.48	4.29	3.40	4.54	2.30	1.89	1.56	35.60

MORGAN PARK, COOK COUNTY, ILLINOIS

Elevation, 666 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1897	.....	.....	3.65	.....	2.06	5.34	.....	.....	.....	.....	.....	.....	.....
1898	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1899	*0.29	1.78	2.34	.....	.....	.....	.....	.....	.....	2.48	1.83	2.55	.....
1900	1.41	3.45	.....	.....	2.11	.....	.....	.....	.....	.....	.....	.....	.....
1901	.70	1.45	3.98	0.69	.85	3.35	5.71	1.21	3.68	1.35	1.42	2.29	26.71
1902	.45	1.14	4.76	2.89	7.84	10.70	6.58	2.47	.....	.....	.....	.....	.....
Means	0.61	1.96	3.68	1.79	3.22	6.46	6.14	1.84	.....	1.92	1.62	2.42	.....

* Four days missing.

MORRISON, WHITESIDE COUNTY, ILLINOIS

Elevation, 685 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1874	.....	.....	.....	.....	.....	.....	2.77	4.02	7.63	1.66	3.20	0.95	.....
1875	0.80	2.53	1.00	4.17	2.00	6.14	9.71	.98	5.24	1.50	.65	2.33	37.06
1876	3.17	6.75	8.09	4.31	4.86	6.25	2.50	5.19	5.32	1.26	1.80	4.00	53.50
1877	.80	.....	6.34	2.24	2.73	5.50	3.03	2.25	1.12	6.90	2.97	1.20	.....
1878	.....	1.14	.....	2.40	6.33	2.81	4.15	5.75	.....	.....	.....	2.00	.....
1879	.....	.....	.....	.....	.....	.....	.....	.....	1.13	1.46	4.69	.94	.....
1880	3.85	1.92	2.37	3.42	.....	5.74	3.35	4.15	4.94	1.62	1.30	.25	.....

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

MORRISON, WHITESIDE COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1881	1.78	4.68	2.85	2.03	2.88	9.79	2.39	.75	3.90	5.76	2.31	2.27	41.39
1882	1.08	.73	3.25	3.16	4.42	10.06	3.50	1.81	1.42	4.44	1.26	2.23	37.36
1883	1.64	5.08	.86	1.49	4.78	4.13	5.17	3.03	1.26	4.22	6.30	2.07	40.03
1884	.....	.....	.....	.....	2.84	4.83	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1895	.....	.....	.....	.....	2.36	3.50	8.28	2.75	5.88	.....	.....	.....	.....
1896	1.73	1.75	1.83	4.91	4.34	3.30	6.55	2.99	5.10	1.00	.97	.39	34.86
1897	2.91	1.73	3.33	2.88	1.95	5.27	3.05	.89	2.16	.43	1.40	1.32	27.32
1898	3.01	1.82	4.42	5.11	4.19	2.98	1.68	5.61	2.68	3.38	1.20	.54	36.62
1899	.30	1.87	1.94	2.73	7.51	2.68	2.78	3.18	.96	3.39	1.29	1.95	30.58
1900	1.31	2.56	3.12	3.95	6.33	1.61	5.35	5.03	4.07	2.75	1.31	.23	37.62
1901	.82	.63	2.92	.49	2.62	3.82	6.42	.29	2.19	.83	1.03	1.36	23.42
1902	.82	1.62	2.46	1.47	6.48	9.60	8.66	5.32	3.99	2.78	2.91	2.45	48.56
1903	1.04	1.47	2.41	4.45	5.49	2.02	7.40	5.78	6.09	3.57	1.05	1.58	42.35
1904	2.53	1.13	3.86	3.18	3.13	1.13	4.04	5.71	3.19	.60	.02	2.81	31.33
1905	.94	2.89	3.13	3.80	6.71	4.03	2.52	3.64	2.81	3.23	1.91	1.48	37.09
1906	2.34	2.24	3.36	3.03	5.27	4.48	4.10	2.91	3.85	1.38	3.17	1.55	37.68
1907	3.98	.46	1.66	1.74	6.03	5.01	9.19	6.43	5.75	1.44	1.42	1.01	44.12
1908	.77	3.10	3.47	2.56	6.84	4.33	3.67	3.71	1.01	.59	2.83	.50	33.38
1909	2.42	2.43	1.60	6.41	3.58	5.57	3.59	3.14	2.60	2.22	4.50	3.72	41.78
1910	1.82	.76	.44	4.09	3.15	.40	1.08	2.44	3.80	.64	.91	.86	20.39
1911	1.25	3.52	.82	4.12	2.67	2.19	3.06	6.81	5.57	2.20	5.12	1.90	39.23
Mean	1.79	2.29	2.84	3.25	4.38	4.55	4.54	3.63	3.60	2.37	2.22	1.61	36.91

NOTE—Values from 1874–April, 1880, inclusive are for Lyndon, six miles distant. Values for 1895, are for Tampico, fifteen miles distant. Values from March, 1896–June, 1901, inclusive, are for Round Grove five miles distant.

MORRISONVILLE, CHRISTIAN COUNTY, ILLINOIS

Elevation, 638 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov	Dec.	Annual
1896	0.43	1.41	1.25	1.98	5.04	3.65	5.98	3.07	4.44	1.19	2.59	0.44	31.47
1897	3.35	1.20	6.02	5.27	4.09	4.99	3.60	1.36	.29	.12	5.29	2.78	38.36
1898	5.02	2.74	6.72	2.92	9.14	2.74	2.74	3.38	4.60	5.11	3.09	2.02	50.22
1899	1.94	2.42	2.96	2.25	5.66	1.84	.72	3.84	.98	3.75	2.11	2.23	30.70
1900	.43	6.39	1.59	1.16	2.95	*6.17	4.35	1.95	4.22	3.11	2.21	1.06	35.59
1901	1.52	1.66	2.26	2.57	1.98	5.53	.71	1.13	1.50	3.27	1.78	3.97	27.88
1902	1.00	.93	4.20	2.81	1.02	10.61	1.30	4.43	2.89	2.45	2.93	3.02	37.59
1903	1.47	3.25	2.35	2.72	1.70	3.15	4.59	4.36	3.25	1.73	.55	1.82	30.94
1904	2.33	1.14	8.67	5.10	2.89	4.05	6.78	3.19	4.62	.74	.07	1.20	40.78
1905	2.26	.99	1.81	3.87	3.17	1.91	6.10	1.78	2.56	5.53	1.74	2.31	34.03
1906	3.44	2.60	3.65	2.41	2.77	1.45	1.87	3.34	2.90	1.17	3.92	2.47	31.99
1907	5.68	.19	2.03	2.60	3.28	4.37	6.88	5.12	1.02	1.62	2.08	2.63	37.50
1908	1.33	3.48	2.14	5.57	7.49	2.15	2.21	2.71	1.49	.11	2.91	1.48	33.07
1909	1.66	3.79	1.55	5.88	5.52	2.48	6.77	.40	3.39	3.37	2.74	1.47	39.02
1910	1.77	1.42	.04	3.43	8.65	3.77	5.05	2.19	4.78	2.44	1.66	1.49	36.69
1911	2.49	1.54	1.57	5.79	.67	3.18	1.59	5.77	8.99	2.32	2.74	1.89	38.54
Means	2.26	2.20	3.05	3.51	4.13	3.88	3.83	3.00	3.25	2.38	2.40	2.02	35.90

* Value for Pana.

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

MT. CARMEL, WABASH COUNTY, ILLINOIS

Elevation, 424 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1876	9.35	2.71	5.04	3.33	1.79	6.24	1.68	3.81	2.63	1.74	2.10	1.95	42.37
1884	.....	.....	.....	.....	.....	.....	2.05	1.29	5.62	2.51	1.97	7.59	.....
1885	3.81	1.48	.95	2.71	2.85	4.38	2.38	5.16	8.57	2.96	4.28	2.20	41.73
1886	4.23	1.90	2.30	3.67	2.89	3.09	1.69	4.14	2.22	.47	5.84	2.61	35.05
1887	.87	4.53	3.96	4.52	4.29	.75	4.14	1.61	2.91	.91	4.42	2.80	35.71
1888	3.46	1.66	5.94	1.99	2.50	3.81	3.19	7.15	.62	2.71	4.69	2.15	39.87
1889	3.24	1.76	1.47	2.04	5.60	4.72	3.60	2.13	3.84	2.29	7.11	2.82	40.62
1890	8.77	7.41	8.27	3.65	3.19	3.02	4.77	6.14	4.66	2.35	5.26	1.73	59.22
1891	2.83	6.04	4.70	2.05	3.19	3.56	1.57	2.11	1.22	.48	5.48	3.25	36.45
1892	2.40	4.58	2.41	6.40	4.94	3.85	2.93	4.11	1.80	1.28	4.26	1.25	40.21
1893	2.61	4.81	4.00	7.93	4.56	5.84	1.41	1.44	3.43	3.18	2.62	2.02	43.85
1894	2.70	4.80	3.87	3.18	5.29	2.10	1.19	2.61	2.34	2.14	.44	4.48	35.14
1895	5.84	.50	2.61	3.14	2.43	1.83	5.77	1.91	2.96	.42	5.75	3.55	36.71
1896	.94	2.40	5.49	2.25	9.23	4.69	3.96	2.52	4.15	2.04	3.34	.41	41.42
1897	4.52	4.10	10.22	6.20	3.14	3.15	3.10	.59	.60	.58	6.69	4.88	47.77
1898	6.53	1.79	11.35	4.42	5.82	8.16	3.57	3.28	3.64	3.53	2.54	2.21	56.84
1899	4.93	4.01	5.16	1.15	3.35	5.65	3.47	1.39	2.03	4.89	1.82	3.33	41.18
1900	2.01	4.41	2.13	1.11	4.09	7.91	4.17	1.09	3.63	1.61	4.32	2.09	38.57
1901	1.63	1.70	5.20	3.34	1.84	4.44	.32	1.46	2.14	4.43	1.74	6.07	34.31
1902	2.37	1.10	2.99	2.07	2.52	4.98	1.65	2.66	3.17	1.83	5.00	5.82	36.16
1903	3.58	5.46	4.44	5.82	2.05	6.22	3.46	2.71	1.88	3.96	1.89	3.44	44.41
1904	4.82	3.50	12.84	2.64	1.32	3.05	4.46	4.15	5.68	.60	.64	3.66	47.36
1905	3.28	2.28	3.14	4.82	4.82	2.39	7.48	3.54	1.26	7.14	3.00	3.32	46.47
1906	5.85	2.52	6.50	2.16	.82	3.58	2.96	5.82	5.66	4.42	7.60	6.04	53.93
1907	9.39	1.28	4.50	3.48	3.80	3.64	3.42	6.88	.64	2.02	4.72	4.92	48.69
1908	1.44	8.86	4.62	5.96	6.22	1.16	1.96	1.00	2.04	.10	2.70	2.03	38.09
1909	3.20	6.06	3.99	5.90	4.42	5.69	4.54	3.88	3.16	3.74	2.60	4.88	52.06
1910	3.44	4.04	.28	3.68	3.08	1.72	6.83	3.14	9.16	8.42	1.74	2.34	47.87
1911	2.26	3.02	1.82	7.10	2.00	4.34	.88	2.28	5.44	2.80	3.36	2.86	38.16
Means	3.94	3.52	4.64	3.81	3.64	4.07	3.19	3.10	3.33	2.60	3.72	3.33	42.86

MT. MORRIS, OGLE COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1888	3.10	.....	.....	.....	.....	.....	4.60	2.70	2.70	4.84	4.20	5.50	.....
1889	3.10	2.20	0.70	3.00	2.90	2.30	3.60	.70	2.95	1.20	.....	.....	.....
Means	3.10	.....	.....	.....	.....	.....	4.10	1.70	2.82	3.02	.....	.....	.....

MT. STERLING, BROWN COUNTY, ILLINOIS

Elevation, 525 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1867	0.40	0.50	1.70	0.00	.....	0.00	.....	.....	.....	.....	3.00	.....	.....
1868	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.80	.....
1869	.....	.....	.....	.....	.....	.....	.....	.....	1.30	.....	4.70	2.70	.....
1870	1.45	.50	7.20	1.20	1.40	0.10	4.55	6.00	3.97	3.15	1.55	2.42	33.49
1871	2.65	2.80	4.10	1.20	.95	3.95	2.20	5.22	1.20	4.20	3.30	2.25	34.02
1872	.26	1.80	2.90	4.30	3.50	6.72	3.40	3.65	2.22	1.00	.....	.....	.....
1873	2.30	.....	.90	10.00	1.20	.30	5.90	2.40	4.30	3.80	1.90	.....	.....
1874	.....	.....	1.30	.....	.....	2.91	2.30	3.40	2.10	.56	1.80	.....	.....
1875	.30	1.90	2.90	4.20	2.50	7.60	11.10	1.40	.....	.....	.15	2.05	.....
1876	1.85	1.75	6.35	5.60	4.30	4.60	7.90	3.60	9.60	1.00	3.60	.50	50.65
1877	.26	.30	4.90	2.80	3.40	7.40	4.70	2.90	2.30	8.10	4.20	4.60	45.86
1878	1.50	3.80	4.80	8.60	6.80	3.00	4.70	7.60	2.50	2.80	1.50	3.10	50.70
1879	1.05	1.15	1.80	1.60	.50	1.80	2.30	2.50	2.00	.70	4.50	1.80	21.70
1880	2.50	2.90	1.50	2.20	6.80	2.50	.80	2.40	1.90	1.70	.....	.....	.....
Means	1.32	1.74	3.36	3.79	3.14	3.41	4.53	3.73	3.04	2.70	2.75	2.36	39.40

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

MT. VERNON, JEFFERSON COUNTY, ILLINOIS

Elevation, 511 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug	Sept.	Oct.	Nov.	Dec.	Annual
1878	.....	.....	.....	.....	4.50	0.75	4.00	4.70	5.00	8.00	8.00	.....	.....
1879	5.40	6.40	.....	1.00	3.00	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	.....	.....	.....	.....	.....	.....	.....	1.75	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1895	.....	.....	.....	.....	2.21	1.94	5.94	3.15	3.13	.27	4.66	3.80	.....
1896	1.77	1.95	4.05	1.67	7.64	3.37	6.30	3.06	6.19	1.86	3.10	.29	41.25
1897	3.57	3.39	10.18	4.47	1.30	7.49	3.00	.77	.41	.56	4.00	1.89	41.03
1898	5.86	1.60	11.94	3.54	5.86	5.28	6.43	3.18	4.54	4.41	2.14	2.12	56.90
1899	3.26	3.38	2.90	2.27	4.19	1.94	1.98	2.40	.90	3.95	1.30	2.19	33.66
1900	1.08	2.94	1.43	1.48	5.37	8.35	3.72	1.81	4.07	1.56	3.49	1.67	36.97
1901	1.37	2.54	3.79	2.51	1.23	2.32	.69	3.29	1.53	2.25	1.79	4.05	27.36
1902	1.45	.92	3.92	1.42	5.14	5.35	2.81	2.85	3.26	.28	4.47	4.91	36.78
1903	1.66	3.37	3.15	3.66	2.54	4.89	.94	2.87	1.94	3.20	.84	2.68	31.74
1904	3.33	2.58	10.01	3.79	5.50	5.17	5.66	3.99	4.22	.56	.81	3.10	48.72
1905	2.42	1.44	3.18	4.92	3.55	2.14	7.97	2.75	4.24	5.87	2.52	3.89	44.89
1906	3.74	2.78	5.58	1.58	1.68	2.75	1.07	2.27	6.50	1.87	6.90	3.18	39.90
1907	8.15	1.00	3.38	3.22	4.39	5.50	3.98	6.61	.97	3.49	3.64	3.50	47.83
1908	2.16	6.63	5.42	6.18	6.23	1.41	3.87	1.83	.92	T	2.33	1.01	37.99
1909	3.82	5.17	4.98	7.50	4.45	7.13	4.03	.30	3.72	1.55	3.23	2.81	48.69
1910	2.27	5.71	.02	3.43	2.61	1.75	5.97	2.07	9.21	6.65	1.83	1.70	43.22
1911	1.23	2.80	1.59	6.25	1.06	2.08	1.44	3.68	7.51	2.62	2.63	3.10	35.99
Means	3.09	3.22	4.72	3.46	3.81	3.87	4.05	2.81	3.79	2.72	3.20	2.70	40.81

MUSCATINE, MUSCATINE COUNTY, IOWA

Elevation, 586 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1846	2.80	4.50	2.10	5.40	3.40	4.20	1.30	0.50	5.50	1.30	1.80	1.75	34.55
1847	.79	1.11	2.94	3.30	3.50	4.60	1.20	3.30	2.10	1.21	3.45	1.00	28.50
1848	1.20	1.61	2.31	.70	3.40	2.50	5.70	9.10	3.00	4.30	1.85	3.95	39.62
1849	3.15	1.03	2.51	4.70	4.70	12.20	1.40	12.20	5.00	4.80	6.60	.87	59.16
1850	4.62	.80	2.08	3.32	3.70	3.50	5.00	13.00	3.90	2.70	3.59	2.87	49.08
1851	1.55	5.34	3.03	3.60	12.60	14.30	8.60	14.00	3.50	1.40	3.63	2.95	74.50
1852	2.52	1.00	8.60	5.30	6.50	2.20	3.70	2.80	8.30	7.60	5.76	5.11	59.39
1853	.40	.90	.90	11.80	4.60	6.40	6.60	1.70	6.20	.20	4.90	.32	44.92
1854	.40	1.80	1.23	1.76	6.21	.66	2.22	3.33	1.13	4.22	.19	.51	23.66
1855	3.25	.71	1.87	2.55	1.94	4.75	2.35	3.51	1.84	2.81	2.23	3.32	31.13
1856	1.22	5.54	.61	3.44	4.39	2.68	2.74	1.36	2.45	5.21	4.35	7.95	41.94
1857	.61	5.80	3.34	1.90	2.75	.90	4.67	6.60	1.88	1.95	2.92	1.53	34.85
1858	1.60	3.80	2.20	5.87	8.40	6.67	7.30	4.12	6.10	4.95	4.54	2.90	58.45
1859	.44	3.89	5.01	3.70	7.49	5.82	2.93	1.70	1.80	.85	1.33	1.00	35.96
1860	1.17	.43	.55	1.67	1.42	3.66	4.03	2.30	2.76	1.00	2.09	4.02	25.10
1861	1.50	2.87	4.50	3.93	3.06	1.72	2.65	2.80	9.30	7.20	2.60	2.10	44.23
1862	4.00	2.50	9.20	7.00	2.65	6.74	3.45	7.25	4.50	2.85	1.32	1.70	53.16
1863	1.70	1.50	2.00	1.52	1.89	.91	.25	4.15	2.41	3.54	1.44	5.52	26.83
1864	1.05	.25	2.59	3.43	3.39	5.75	3.25	2.31	3.20	3.11	2.59	1.85	32.77
1865	.46	2.90	2.76	6.02	1.05	3.69	4.50	4.25	4.23	3.53	.20	.62	34.21
1866	3.38	.58	1.94	3.91	1.18	2.82	5.18	3.36	4.71	1.94	1.01	2.85	32.86
1867	.75	3.62	1.93	2.34	5.77	4.70	3.24	1.65	3.44	1.00	2.85	.95	32.24
1868	.30	.95	5.55	7.43	7.07	2.50	4.59	2.85	5.18	.94	2.71	.84	40.91
1869	1.62	1.63	1.53	2.64	4.47	9.15	8.55	5.35	1.95	1.59	2.47	2.41	43.30
1870	2.04	.18	3.37	.38	1.86	.93	1.05	4.46	4.59	3.95	.87	.93	24.61
1871	2.15	2.09	1.88	1.95	1.93	6.71	3.28	6.12	1.07	3.73	2.30	2.90	36.11
1872	.06	*.30	2.55	3.92	7.57	5.17	2.97	5.84	4.15	.84	1.30	.74	35.41
1873	8.49	.35	1.90	1.45	4.31	1.91	2.61	.....	1.30	1.44	1.18	3.49	28.43
1874	4.72	2.88	2.39	2.93	1.51	3.70	2.26	3.54	6.58	.90	2.49	.88	34.78
1875	.65	1.50	1.99	.90	2.65	4.97	6.72	2.56	9.38	1.27	.63	4.37	37.59
1876	3.23	2.85	3.54	4.00	7.38	4.45	9.15	5.72	6.53	1.84	3.48	1.40	53.57
1877	1.58	2.00	4.28	3.57	2.25	7.44	4.82	4.49	1.25	6.03	3.06	3.01	43.78
1878	.40	1.56	2.87	2.36	7.49	4.09	3.57	7.43	2.81	4.35	.77	1.60	39.30
1879	1.20	1.07	2.18	1.81	4.54	3.78	3.40	4.56	2.37	2.85	4.65	1.42	33.83
1880	3.02	1.63	3.62	3.02	3.25	7.22	3.84	4.48	3.17	.25	.97	1.31	35.78
1881	1.34	3.49	2.58	2.11	2.43	10.38	3.77	1.36	6.59	7.03	2.83	1.75	45.66

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

MUSCATINE, MUSCATINE COUNTY, IOWA—*Concluded*

Year	Jan	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1882	.84	1.10	2.98	4.00	8.36	8.25	4.55	1.75	1.38	4.29	7.15	2.02	46.67
1883	1.66	4.67	.75	5.00	6.19	4.77	4.31	1.45	1.19	6.23	3.45	1.45	41.12
1884	1.05	1.40	4.28	2.08	5.57	4.03	3.63	5.77	5.23	6.46	1.57	4.42	45.49
1885	2.38	2.21	1.25	*4.00	4.18	4.81	5.03	7.38	2.88	2.80	.83	2.32	39.07
1886	4.21	1.43	4.16	2.62	5.05	*1.30	.32	2.62	3.05	4.70	.95	.71	31.12
1887	1.88	4.12	1.14	1.26	2.26	2.10	2.90	2.40	3.49	2.24	.98	3.53	28.80
1888	1.49	.70	3.10	*1.60	6.78	3.82	3.39	7.24	2.00	1.50	4.43	2.84	38.59
1889	1.43	1.38	.65	4.28	4.17	5.68	6.69	1.15	3.95	1.04	1.65	1.40	33.47
1890	1.90	1.70	3.29	1.12	3.61	6.68	1.88	2.35	2.52	4.24	1.38	1.20	31.87
1891	1.75	2.19	3.50	*3.10	2.51	4.87	3.29	5.20	1.35	1.49	*3.50	2.51	35.26
1892	1.35	1.08	3.90	4.31	10.32	8.83	3.85	1.70	.47	.82	2.21	2.56	42.30
1893	1.35	1.60	3.49	5.33	2.35	3.61	2.59	1.02	5.05	1.14	2.40	1.27	31.20
1894	1.80	1.25	2.44	5.33	2.05	2.04	.24	2.74	5.85	2.10	2.99	.76	29.59
1895	1.83	.84	1.75	.83	3.05	.98	7.82	4.22	2.12	1.02	2.12	2.62	29.20
1896	1.10	1.18	1.32	5.72	5.21	2.02	5.59	4.43	3.63	1.89	1.09	1.27	34.45
1897	5.46	2.72	2.80	5.23	1.59	2.54	3.51	1.21	2.50	.78	2.07	1.94	32.35
1898	3.33	1.72	3.64	3.74	5.30	3.34	.73	6.22	2.34	3.74	1.76	.51	36.37
1899	.38	1.52	1.75	3.18	7.61	2.35	2.67	3.14	1.08	1.24	1.52	2.21	28.65
1900	1.72	2.65	3.86	2.02	4.05	1.57	3.65	6.31	4.31	1.96	1.36	.99	34.45
1901	1.46	1.63	2.81	1.81	1.26	4.50	1.44	.40	2.17	.99	.95	1.72	21.14
1902	.59	.95	2.33	2.14	4.66	8.79	7.93	8.94	4.21	3.28	3.28	2.41	49.51
1903	.58	1.72	2.01	3.76	6.80	3.46	4.79	5.13	5.26	1.82	.97	.99	37.29
1904	2.27	.71	2.65	2.83	2.87	2.35	3.52	6.44	2.14	1.01	.20	2.43	29.42
1905	.72	2.15	1.42	3.08	2.84	6.73	2.81	3.52	1.17	4.05	2.41	.87	31.77
1906	3.12	2.91	3.12	1.88	3.76	3.89	1.96	2.75	2.78	1.42	2.55	1.69	31.83
1907	4.78	.49	2.55	2.35	3.26	4.66	3.80	5.20	2.55	1.49	.97	.81	42.91
1908	66	2.03	2.17	2.34	6.10	3.86	3.72	3.77	2.02	2.10	2.80	.56	37.13
1909	2.19	2.30	1.58	5.46	3.35	4.43	3.63	2.61	1.96	1.68	5.53	2.90	37.62
1910	1.73	.74	.36	2.40	4.39	2.62	3.04	3.17	2.80	.66	.42	.96	23.29
1911	1.38	3.91	.95	3.45	2.65	2.33	4.35	3.11	3.58	2.48	4.22	2.02	39.43
Means	1.90	1.97	2.66	3.36	4.40	4.46	3.87	4.28	3.55	2.64	2.40	2.06	37.56

* Values taken from surrounding stations.

NEPONSET, BUREAU COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug	Sept.	Oct.	Nov.	Dec.	Annual
1880	.....	.....	3.21	1.60	5.12	1.36	0.43	1.39	2.91	1.54	1.40	0.70	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1887	2.46	5.58	1.33	.....	1.21	1.55	1.39	.....	2.46	.....	.....	.....	.....
Means	.....	.....	2.27	.....	3.16	1.46	0.91	.....	2.68	.....	.....	.....	.....

NEW ATHENS, ST. CLAIR COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1887	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6.25	4.30	.....
1888	3.60	2.50	2.13	1.90	2.53	5.55	2.28	7.75	2.50	2.40	2.05	2.65	37.84
Means	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.15	3.48	.....

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

NEW BURNSIDE, JOHNSON COUNTY, ILLINOIS

Elevation, 556 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1895	.....	.....	2.65	2.20	1.98	2.24	5.51	1.26	2.81	.60	7.03	2.05	.....
1896	1.33	1.20	2.86	3.36	9.44	5.90	4.90	2.54	2.54	1.74	3.14	.68	39.63
1897	2.70	3.35	10.97	5.82	1.10	4.15	5.81	.81	1.18	1.20	4.07	2.71	43.87
1898	4.67	1.07	8.51	3.76	7.28	2.77	5.82	3.28	4.33	4.35	.99	2.24	49.07
1899	5.36	2.63	4.91	4.04	5.37	2.22	4.72	1.42	1.53	5.18	1.86	3.78	43.02
1900	1.84	3.36	1.89	2.08	3.90	9.08	3.43	.77	2.36	2.74	3.99	1.61	37.05
1901	1.01	2.14	3.72	3.63	1.63	1.34	.33	2.81	1.00	3.92	1.70	4.85	28.08
1902	2.89	.77	3.08	3.49	3.20	3.40	2.04	4.33	5.07	*.78	5.71	6.03	40.79
1903	1.01	4.90	6.21	2.76	3.06	3.13	1.43	2.13	.89	3.35	1.06	3.19	33.12
1904	4.49	2.92	7.48	5.06	3.11	3.83	5.24	2.33	5.31	1.74	.51	3.20	45.22
1905	2.61	1.72	2.72	5.25	5.59	2.31	10.39	3.00	2.96	6.44	2.74	3.58	49.31
1906	6.65	2.54	6.68	1.32	1.66	3.11	4.76	4.88	5.43	.86	8.33	8.31	54.53
1907	9.97	2.11	3.77	2.84	4.85	5.26	4.72	5.56	1.28	3.10	4.30	3.16	50.92
1908	2.84	7.67	3.18	6.52	5.31	1.94	3.74	3.13	1.31	T	4.85	.62	41.11
1909	2.60	5.35	3.92	5.45	4.01	4.67	3.28	.15	5.47	.83	4.09	3.06	42.88
1910	3.06	3.05	.00	4.80	2.96	2.95	7.38	1.81	1.70	12.48	0.23	2.93	43.35
1911	T	1.84	1.78	11.22	1.78	2.88	3.17	4.09	5.45	2.94	2.14	2.38	39.67
Means	3.31	2.92	4.37	4.33	3.90	3.60	4.51	2.60	2.98	3.07	3.34	3.20	42.60

* Values for Halfway, fifteen miles distant.

NEW HAVEN, GALLATIN COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1891	.....	.....	.....	.....	.....	3.08	2.67	7.42	0.94	0.10	6.14	5.52	.....
1892	1.42	.....	1.72	4.01	5.87	2.53	1.91	4.97	2.44	2.20	.....	3.06	.....
1893	1.48	3.77	2.01	7.14	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	1.45	.....	1.86	5.58	.....	2.80	2.29	6.20	1.69	1.15	.....	4.29	.....

OLNEY, RICHLAND COUNTY, ILLINOIS

Elevation 486 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1860	.....	.....	.....	.....	.....	.....	.....	.....	4.00	1.94	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1878	.....	.....	.....	.....	.....	.....	1.10	1.11	1.66	3.57	1.48	3.12	.....
1879	1.36	1.28	4.37	2.27	1.57	3.50	1.87	3.30	1.35	1.51	4.17	3.09	29.64
1880	4.70	2.06	2.79	2.53	4.08	2.91	2.55	3.06	3.01	2.85	4.75	2.75	39.04
1881	.....	.....	.....	.....	.....	.....	.11	.35	3.17	6.99	5.91	3.11	.....
1882	3.27	5.41	4.31	1.40	6.20	5.01	3.09	5.55	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.31	.....
1887	1.16	.....	6.00	5.44	4.44	.....	2.51	1.82	2.80	.75	5.52	.....	.....
1888	1.93	1.57	5.25	1.80	2.61	4.41	5.64	9.78	.91	2.82	7.06	2.65	46.43
1889	2.73	2.66	1.91	1.23	4.70	5.71	7.59	3.32	5.09	2.71	4.66	3.96	46.27
1890	7.21	4.48	6.52	3.81	3.95	4.37	1.25	4.44	5.84	1.38	2.46	2.16	47.87
1891	2.06	5.48	4.23	2.74	1.30	3.54	.56	4.41	1.33	1.45	6.71	2.37	36.18
1892	1.35	4.15	1.56	7.85	5.11	2.07	4.14	3.26	.76	.82	3.39	1.03	35.49
1893	.64	3.73	4.05	10.44	4.14	5.38	.96	2.65	3.95	1.97	3.10	1.74	42.75
1894	2.27	3.19	3.06	2.80	5.20	1.39	2.28	2.63	2.42	2.02	.47	3.34	31.07
1895	4.25	.45	1.40	2.15	1.78	3.00	5.85	1.48	2.06	.13	4.40	3.47	30.42
1896	.89	2.21	3.07	1.52	6.13	3.82	8.67	.47	4.57	1.69	5.56	.46	39.06
1897	3.77	2.92	11.77	6.49	2.75	4.48	2.85	.40	.71	.52	6.57	3.86	47.09
1898	5.22	1.93	10.97	5.00	4.38	1.10	4.76	3.58	4.41	3.06	2.14	1.89	48.44
1899	3.98	2.81	3.03	.99	2.93	3.95	2.82	2.92	.93	2.86	1.82	2.66	31.70
1900	.93	2.99	2.37	1.21	3.14	6.29	4.15	1.36	3.67	1.58	2.54	1.67	31.90
1901	1.00	2.88	4.24	2.58	3.09	2.56	.25	2.45	1.07	2.49	1.27	5.16	29.04

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

OLNEY, RICHLAND COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1902	1.41	0.69	2.64	1.51	1.85	4.70	3.07	3.20	2.14	1.33	3.51	4.01	30.06
1903	2.94	4.02	3.66	4.96	.94	3.57	4.46	2.49	.42	1.99	1.35	2.87	33.67
1904	4.00	2.05	10.60	2.20	6.56	3.06	2.27	1.76	6.13	.53	.94	4.02	44.12
1905	2.89	1.29	2.61	3.74	3.11	2.09	4.13	4.40	2.07	8.70	1.65	2.41	39.09
1906	3.37	2.33	4.84	1.93	1.29	3.21	3.97	3.77	7.75	2.98	5.55	4.19	45.18
1907	7.53	.52	4.50	3.92	6.38	5.77	7.08	6.37	1.35	2.43	3.57	3.52	52.94
1908	1.98	5.17	3.76	5.07	6.63	1.01	3.52	1.02	.83	.24	3.81	1.05	34.09
1909	2.77	6.42	3.80	3.44	3.52	5.57	5.03	.81	3.94	3.60	4.13	3.28	46.31
1910	2.97	3.57	.27	3.79	5.18	3.07	4.30	2.10	6.72	6.55	2.32	1.78	42.62
1911	2.06	2.41	2.10	6.81	1.73	7.93	1.28	2.40	12.23	3.05	3.03	2.62	47.65
Means	2.89	2.91	4.28	3.56	3.74	3.83	3.40	2.89	3.24	2.48	3.58	2.81	39.54

Values from 1878–1882, inclusive, are for St. Marie fourteen miles distant.

OQUAWKA, HENDERSON COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1870							2.70	4.98	6.55	4.12	1.67	0.62	
1871	2.82	3.02	1.96	2.78	1.34	2.26	1.79	12.00	.45	5.43	2.34	1.99	38.18
1872	.13	.48	2.33	4.52	5.20	4.59	2.66	4.85	2.91	.57	1.46	1.06	30.76
1873	5.24	.86	1.29	3.52	4.15	1.91							
1874													
1875	.24	1.66	1.62	1.21									
1885					1.37	3.03	3.62						
1886		.70	1.64	3.12	7.37								
1887						1.25		2.50	4.36	2.25	.75	4.60	
1888	1.65	.95	3.20	1.25	5.06	3.37	4.06	3.25	1.00	1.65	3.63	2.75	31.82
1889	2.62	1.20											
Means	2.12	1.27	2.01	2.73	4.08	2.74	2.97	5.52	3.05	2.80	1.97	2.20	33.59

OREGON, OGLE COUNTY, ILLINOIS
Elevation, 702 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1893	1.50	1.52	2.86	4.34	4.43	3.72	4.36	0.81	1.59	1.10	2.00	2.02	30.25
1894	1.63	.88	2.03	2.57	4.86	1.44	.85	.50	*3.19	2.00			
1895	1.35	.95	.82	1.69	3.35							2.63	
1896		1.52	1.70	3.68	5.21	3.55	4.48	.99	5.61	.85	1.73	.30	
1897	3.76	.77	3.05	2.40	1.58	4.19							
1909							.45	4.73	2.79	1.00	5.07	3.68	
1910	1.72	.80	T	3.74	4.65	.20	.95	2.54	2.20	.72	1.21	1.40	20.13
1911	1.39	2.79	.77	6.48	1.67	5.61	1.27	9.74	7.57	2.58	5.21	2.45	47.53
Means	1.89	1.32	1.60	3.56	3.68	3.12	2.06	3.22	3.88	1.38	3.04	2.08	32.64

* Four days missing.

OSCEOLA, STARK COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1860	3.43	2.62	2.00	2.75	1.99	5.30	6.60	6.00	3.30		4.65	2.43	
1861	1.80	4.55	2.70	10.30	5.90								
Means	2.62	3.58	2.35	6.58	3.94								

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

OTTAWA, LASALLE COUNTY, ILLINOIS

Elevation, 500 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1856	1.90	0.43	0.14	1.36	6.20	2.11	2.71	1.54	2.38	2.86	3.64	4.82	30.09
1857	.40	4.45	3.06	1.41	3.65	3.95	3.97	6.10	.89	2.68	2.96	1.12	34.70
1858	1.65	3.15	2.98	4.55	8.36	6.57	4.82	2.37	3.55	3.97	2.35	2.55	46.87
1859	1.71	.86	5.24	4.08	3.12	1.68	.73	3.44	1.66	2.34	2.09	.94	27.89
1860	2.66	1.59	.70	1.49	2.20	2.54	2.89	.79	1.88	.40	4.03	5.90	27.07
1861	1.22	1.95	2.54	4.97	3.60	4.64	5.23	2.41	5.17	3.57	1.44	2.15	38.89
1862	5.80	1.29	4.16	4.85	3.61	5.61	8.92	6.82	7.55	2.49	2.48	2.13	55.71
1863	*4.45	3.29	3.26	3.26	3.64	*1.26	*4.28	3.11	2.74	4.23	1.78	1.40	36.70
1864	2.43	1.64	2.70	3.64	1.79	1.52	2.94	1.85	2.58	1.66	3.29	3.49	29.53
1865	.45	3.99	3.15	5.48	*.97	5.17	5.01	5.50	3.89	1.84	.49	.59	36.53
1866	2.85	2.49	1.97	1.62	2.16	1.57	5.73	3.62	4.72	2.16	.90	2.97	32.76
1867	1.28	4.55	1.42	1.72	4.64	3.73	4.23	2.41	.11	.92	*1.59	1.66	28.26
1868	1.07	1.40	5.28	2.60	7.64	2.21	1.96	3.19	3.48	*.95	3.00	*.60	33.38
1869	*1.41	1.95	1.38	4.58	7.45	6.27	4.40	4.24	1.33	1.48	1.88	1.63	38.00
1870	5.28	.90	3.68	.85	1.15	1.39	1.90	2.26	3.63	4.33	1.42	*3.00	29.79
1886										1.60	.60	.43	
1887	1.82	3.25	.64	.39	1.08	1.12	1.17	3.06	2.77	2.80	2.17	3.33	23.60
1888	1.80	1.88	3.70	1.23	5.39	2.01	3.58	1.77	.60	2.71	3.38	2.22	30.27
1889	1.91	1.16	1.77	2.44	4.36	4.61	5.67	2.00	3.92	1.51	3.12	1.80	34.27
1890	1.94	1.40	3.33	1.87	3.99	6.87	.34	2.72	2.48	3.89	2.06	.27	31.16
1891	2.86	2.28	2.56	3.96	1.84	3.99	4.45	5.11	1.27	.56	4.75	1.74	35.37
1892	1.45	1.52	2.70	3.56	13.25	9.80	4.92	.81	2.56	.63	2.48	1.84	45.52
1893	2.20	3.03	3.30	5.23	1.95	2.49	1.02	.77	2.29	1.10	2.18	2.16	27.72
1894	2.38	1.58	2.57	1.51	4.01	3.03	.80	1.75	7.18	1.63	2.09	1.19	29.72
1895	1.22	.70	.82	2.02	1.06	1.02	4.79	2.26	1.47	1.16	5.27	5.77	27.56
1896	1.37	1.65	1.32	3.38	4.24	2.22	8.63	2.43	9.38	.17	3.43	.28	38.50
1897	5.98	1.71	4.47	1.88	.99	6.90	2.99	.74	1.89	.46	4.37	1.74	34.12
1898	5.24	2.38	5.21	3.12	6.72	5.80	1.30	4.31	5.90	4.73	2.88	1.42	49.01
1899	.63	2.10	3.21	1.50	5.08	1.42	5.70	3.02	2.15	2.53	1.46	2.03	30.83
1900	1.60	4.53	2.91	1.53	5.60	1.96	4.53	7.24	2.26	2.24	3.16	.31	37.87
1901	1.76	2.10	3.51	.61	2.15	2.67	5.47	.81	3.20	.91	1.49	2.09	26.77
1902	.63	1.41	4.89	2.55	5.64	10.51	10.49	4.40	6.76	1.87	4.29	2.01	55.45
1903	1.13	2.35	3.10	5.08	4.19	3.78	1.94	4.90	6.03	1.43	.46	1.91	36.30
1904	2.54	1.80	4.87	3.93	3.00	1.89	5.14	3.58	3.27	.26	.08	1.86	32.22
1905	1.30	1.93	2.09	5.15	3.68	3.39	1.68	4.12	2.13	1.87	2.01	1.70	31.05
1906	2.07	2.26	2.02	1.63	2.37	2.64	1.45	4.57	5.09	1.23	2.63	1.22	29.18
1907	5.25	.15	2.55	2.69	4.84	2.50	6.92	4.49	4.94	1.00	1.96	1.79	39.08
1908	.86	1.53	3.87	3.48	8.17	1.77	3.05	2.03	.35	.65	1.79	.99	28.54
1909	.98	3.65	1.64	5.19	2.57	3.69	2.95	3.59	4.08	1.71	2.57	3.02	35.64
1910	2.78	.98	.42	3.28	5.28	1.25	.67	3.91	6.23	1.25	.74	.98	27.77
1911	1.80	2.13	1.80	3.91	2.64	1.71	1.60	6.78	6.88	2.61	2.28	2.15	35.79
Means	2.20	2.08	2.77	2.94	4.10	3.48	3.76	3.27	3.51	1.94	2.36	1.98	34.49

* Values estimated from surrounding stations.

PADUCAH, M'CRACKEN COUNTY, KENTUCKY

Elevation, 341 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1882	2.01	4.26	4.90	4.37	10.31	3.26	7.88	7.59	1.28	1.89	4.34	2.58	54.67
1883	4.35	6.22	7.26	6.86	4.28	3.54	6.64	2.50	1.06	7.38	3.93	3.41	57.43
1884	2.31	4.40	3.70	4.89	4.62	5.11	5.01	3.24	5.03	3.21	.50	4.55	46.57
1885	1.62	.75	2.52	1.52	3.05	8.68	1.34	2.52	2.61	1.65	2.55	3.15	31.96
1886	2.29	2.02	2.17	5.02	1.09	5.61	1.14	6.21	1.74	.28	4.07	1.71	33.35
1887	1.23	5.33	3.12	1.50	1.57	1.92	3.03	1.30	2.04	.51	4.13	2.01	27.69
1888	4.34	1.70	5.00	3.30	3.43	4.23	1.23	4.56	.10	1.54	5.44	.65	35.52
1889	3.64	1.61	1.92	1.34	4.48	5.19	4.91	.45	5.69	.72	5.46	.89	36.30
1890	6.82	8.35	5.23	4.62	4.42	.84	1.33	7.12	2.61	3.77	7.56	2.81	54.98
1891	4.08	6.59	8.10	1.91	1.88	3.63	3.59	6.07	.49	.31	6.42	5.00	48.07
1892	.62	2.56	2.55	9.08	2.69	1.55	3.15	3.95	.04	.62	2.35	3.62	32.78
1893	3.00	4.37	2.08	5.11	7.53	4.80	.81	2.80	3.54	5.84	3.19	2.16	45.23
1894	2.70	5.63	3.83	3.82	3.92	1.66	1.58	2.32	2.87	1.15	.88	3.75	34.11
1895	5.11	.28	3.30	4.07	1.47	4.02	5.27	1.95	2.38	.88	6.16	2.94	37.83
1896	1.68	2.05	4.91	1.82	8.79	4.22	3.51	1.98	2.82	2.34	5.27	2.33	41.72

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

PADUCAH, M'CRACKEN COUNTY, KENTUCKY—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1897	3.94	4.53	9.38	9.89	2.53	5.98	3.83	1.23	0.00	1.82	4.69	3.49	51.31
1898	9.06	.95	9.49	3.85	5.37	4.81	3.83	2.72	7.83	3.43	1.91	1.76	55.01
1899	8.08	2.81	5.88	3.65	5.79	1.54	6.52	2.91	1.36	3.11	2.15	4.75	48.55
1900	2.60	5.78	1.61	2.87	5.05	8.99	4.89	.69	2.05	2.88	6.22	2.36	45.99
1901	1.77	2.28	3.83	2.72	1.41	1.54	.83	6.56	4.65	6.05	2.06	7.58	41.28
1902	4.45	1.80	4.04	2.64	2.35	2.74	3.56	3.28	6.48	2.67	6.68	9.53	50.22
1903	3.20	6.16	3.42	2.14	3.92	.83	3.14	2.08	.79	1.90	2.26	4.02	33.86
1904	4.77	2.12	6.99	3.32	1.21	3.42	6.27	1.00	3.57	1.35	.20	4.38	38.60
1905	3.17	2.03	3.75	3.80	5.57	2.18	6.19	2.10	1.66	4.85	4.41	4.20	43.91
1906	4.50	1.86	7.24	1.28	.74	4.03	6.09	2.72	4.44	2.20	7.85	7.14	50.09
1907	10.87	3.86	3.56	4.28	6.99	3.44	3.18	3.00	2.49	2.82	4.76	3.88	53.13
1908	2.32	8.26	3.32	6.78	4.22	3.26	3.42	4.97	.57	.20	5.01	1.49	43.82
1909	3.13	10.18	6.18	5.07	4.69	4.25	6.59	.75	4.44	1.38	3.43	3.18	53.27
1910	3.54	3.24	.88	6.90	3.20	2.92	11.94	2.20	1.20	9.22	2.02	4.03	51.29
1911	4.88	2.81	3.00	6.71	1.60	3.28	2.06	6.09	3.38	1.49	4.48	4.40	44.18
Means	3.87	3.83	4.44	4.17	3.94	3.71	4.09	3.23	2.64	2.57	4.01	3.59	44.09

PALESTINE, CRAWFORD COUNTY, ILLINOIS

Elevation, 500 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1882	.....	.....	.....	.....	.....	5.60	1.92	3.27	2.17	1.68	2.02	3.88	.....
1883	2.10	8.47	3.62	3.40	2.09	4.43	8.30	1.95	.35	7.58	7.65	4.10	54.04
1884	1.90	4.40	1.79	3.05	5.38	5.09	3.34	1.75	5.29	1.40	2.27	5.84	41.50
1885	3.25	1.65	.46	4.70	2.85	3.40	2.40	3.08	8.73	2.59	2.61	2.33	38.05
1886	2.88	1.70	2.55	5.36	3.56	6.15	3.69	3.21	2.21	.26	5.52	2.60	39.69
1887	1.01	4.83	4.18	3.84	5.30	1.30	1.59	2.60	2.44	.88	4.21	3.40	35.62
1888	1.75	1.47	4.72	2.08	2.40	*4.98	2.30	4.50	.76	2.55	5.67	2.16	35.34
1889	2.72	2.20	1.71	1.37	4.00	5.50	2.46	2.95	5.44	2.33	5.43	1.93	38.04
1890	9.20	4.96	5.65	4.07	4.31	2.58	2.35	3.56	5.38	2.97	2.74	1.90	49.67
1891	2.00	5.68	4.15	1.84	.76	*2.87	.86	6.30	1.33	1.38	5.65	2.13	34.95
1892	1.15	4.97	1.88	9.18	6.60	3.53	2.47	3.02	1.60	1.08	4.43	2.00	41.91
1893	2.00	4.39	3.40	9.12	3.70	4.60	.71	2.71	3.33	3.37	3.12	1.53	41.98
1894	2.21	5.01	1.97	2.88	5.60	2.68	1.85	3.92	2.94	2.15	1.05	2.22	34.48
1895	4.37	*.63	1.66	3.65	3.43	2.05	7.04	3.10	1.46	.57	4.85	3.69	36.50
1896	1.00	2.47	2.19	1.07	3.90	7.33	7.76	3.22	4.30	2.60	5.30	.54	41.68
1897	3.38	2.95	11.02	5.60	3.45	3.61	2.08	.01	1.60	1.09	6.33	3.18	44.30
1898	5.33	1.56	11.45	3.82	3.15	4.06	2.80	4.29	7.42	4.61	3.15	2.33	53.97
1899	3.74	1.95	4.96	1.91	3.28	3.40	2.98	3.12	1.47	2.99	2.13	3.62	35.55
1900	1.95	4.55	4.02	1.47	3.86	6.77	11.96	2.00	4.43	1.59	4.06	2.64	49.30
1901	1.03	2.95	5.57	2.52	1.34	6.42	.97	2.75	1.38	2.79	2.00	5.34	35.06
1902	2.46	1.43	3.77	2.23	4.60	7.73	1.63	6.22	3.14	2.40	3.37	3.78	42.76
1903	2.60	3.97	4.47	5.41	.52	2.51	4.51	6.83	.73	2.66	1.95	1.42	37.58
1904	4.10	2.30	9.76	1.95	3.16	2.22	3.81	2.78	5.45	.10	1.10	4.48	41.21
1905	2.00	1.45	2.82	3.36	3.67	1.46	6.28	2.94	2.44	8.54	1.80	2.61	39.37
1906	4.81	2.25	5.07	1.32	1.40	1.66	3.56	9.97	4.05	1.09	5.05	3.35	43.58
1907	6.55	.10	5.55	3.54	4.15	4.48	4.15	7.32	.60	2.70	2.90	3.34	45.38
1908	1.60	5.89	4.13	4.64	9.58	1.96	2.48	.87	1.78	.10	3.23	1.40	37.66
1909	*3.00	*5.66	4.51	3.47	3.18	6.42	5.24	.73	1.83	3.11	3.70	3.61	44.46
1910	2.71	3.67	.19	2.53	3.37	2.27	11.11	.59	4.51	6.64	2.45	2.19	42.23
1911	2.95	2.56	2.33	5.18	1.42	4.35	2.26	1.78	11.52	4.19	2.26	2.94	43.74
Means	2.86	3.32	4.12	3.60	3.58	4.02	3.82	3.38	3.34	2.60	3.60	2.88	41.37

* Interpolated from surrounding stations.

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

PANA, CHRISTIAN COUNTY, ILLINOIS
Elevation, 692 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1869	.....	.....	.....	.....	.....	3.10	3.50	6.05	2.15	1.35	4.55	2.50	.....
1870	2.70	0.30	2.70	0.90	0.90	1.30	3.50	4.80	3.55	2.70	1.25	1.65	26.25
1871	4.50	2.50	.30	.40	1.40	1.70	1.65	1.90	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1882	.....	.....	.....	.....	.....	.....	.....	3.68	.15	2.00	2.75	1.50	.....
1883	1.28	4.50	1.00	2.00	4.31	3.15	5.75	1.50	.75	8.00	3.72	.82	36.78
1884	1.06	4.00	1.50	2.58	2.25	3.49	4.00	1.25	7.33	2.50	2.00	4.88	36.84
1885	2.60	.88	.18	5.11	5.41	10.50	6.61	3.59	7.00	5.33	1.33	1.65	50.19
1886	1.68	2.35	2.28	3.07	5.50	5.58	1.50	7.16	8.74	.16	3.39	1.67	43.08
1887	.65	6.08	3.41	5.68	6.50	1.66	3.05	5.35	5.08	1.33	7.58	6.41	52.78
1888	3.08	3.74	6.08	3.50	6.08	8.74	5.73	6.66	1.66	5.83	6.25	5.58	62.93
1889	2.73	2.05	3.25	1.25	6.83	4.68	2.24	.08	4.57	2.75	8.16	4.33	42.92
1890	11.65	2.01	6.08	3.04	3.57	5.25	3.33	3.66	4.66	1.16	3.50	1.12	49.03
1891	.56	2.64	4.32	4.16	.66	6.25	†2.10	6.50	1.00	2.26	10.09	1.79	42.33
1892	2.11	5.61	3.32	11.99	8.57	2.76	6.49	6.07	3.25	1.57	7.25	4.33	63.32
1893	.48	4.60	3.77	.....	1.60	2.99	2.49	.30	2.74	.28	.....	.....	.....
1894	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*1895	.....	.....	.....	.....	.....	.....	.....	1.50	3.25	.25	3.28	4.68	.....
*1896	.43	1.41	1.25	1.98	5.04	3.65	5.98	3.07	4.44	1.19	2.59	.44	31.47
*1897	3.35	1.20	6.02	5.27	4.09	4.99	3.60	1.36	.29	.12	5.29	2.78	38.36
*1898	5.02	2.74	6.72	2.92	6.49	2.31	2.34	3.17	3.90	4.85	2.48	1.33	44.27
1899	2.00	1.91	3.44	1.38	6.84	4.01	1.44	2.44	1.35	3.97	1.72	3.00	33.50
1900	.51	5.31	1.66	1.32	2.30	6.17	5.49	1.98	3.36	2.00	3.63	1.21	34.94
1901	1.64	1.92	3.71	2.19	3.61	3.94	1.08	2.66	1.73	2.64	1.70	3.16	29.98
1902	1.47	.96	3.83	2.94	1.71	10.43	1.48	5.51	4.01	2.32	3.16	3.68	41.50
1903	1.43	4.15	2.84	3.66	1.95	3.25	3.53	4.83	2.41	2.24	.42	1.99	32.70
1904	2.85	1.19	7.86	4.48	2.00	3.50	6.39	4.20	4.26	.54	.10	1.34	38.71
1905	2.16	1.17	1.49	2.31	3.65	2.29	6.88	1.66	2.32	5.45	1.95	2.27	33.60
1906	2.78	2.33	4.75	3.94	2.46	3.87	.89	3.18	7.18	1.03	4.86	2.99	40.26
1907	6.18	.66	2.61	3.02	3.78	4.85	5.93	5.91	1.01	1.95	1.95	3.97	41.82
1908	1.97	5.87	2.37	5.42	10.21	2.38	2.48	1.60	1.05	.13	3.09	1.55	38.12
1909	2.72	5.05	1.68	6.25	3.96	3.71	8.82	1.74	3.73	3.20	4.48	2.53	47.87
1910	1.90	2.33	.40	3.49	6.06	2.52	4.30	6.71	5.95	2.11	1.96	1.05	38.78
1911	2.93	2.87	1.91	5.14	1.12	4.63	1.55	4.65	10.87	2.61	2.59	2.03	42.90
Means	2.57	2.84	3.13	3.55	4.10	3.96	3.80	3.59	3.67	2.38	3.57	2.61	41.34

† Interpolated from surrounding stations.
* From August, 1895–April, 1898, values are for Morrisonville, nineteen miles distant.

PARIS, EDGAR COUNTY, ILLINOIS
Elevation, 600 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1868	.....	.....	.....	.....	.....	.....	.....	.....	4.55	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.53	.....
1887	1.40	4.19	2.40	2.78	5.03	0.34	0.81	3.40	3.74	0.72	6.47	4.39	35.67
1888	2.75	2.10	3.52	2.52	4.35	4.62	2.94	4.09	2.44	2.66	4.78	2.32	39.09
1889	1.35	1.17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1892	.....	1.31	.09	7.50	10.70	4.50	3.50	.....	.....	.....	.....	.....	.....
1893	.....	.....	.....	6.26	4.70	4.24	1.19	.38	3.24	1.41	3.10	1.69	.....
1894	2.95	2.64	3.80	2.17	3.31	1.78	1.74	2.00	3.78	.69	3.45	1.51	29.82
1895	1.71	1.12	.91	3.87	.88	2.21	2.95	1.65	2.46	.28	4.84	3.05	25.93
1896	.....	.....	.....	1.28	5.92	5.45	8.39	5.41	5.94	.....	1.96	.....	.....
1897	.....	.....	2.99	4.63	2.04	5.60	2.70	.53	.38	.25	6.41	2.93	.....
1898	4.29	1.69	8.34	2.41	3.05	3.84	1.67	3.31	4.71	3.73	2.30	1.37	40.71
1899	2.97	2.22	2.73	.90	4.90	2.04	3.99	3.09	.92	†3.92	3.59	2.83	34.10
1900	.80	†5.31	1.63	2.05	2.17	6.37	4.35	4.75	3.13	4.04	3.64	.98	39.22
1901	1.48	1.65	3.87	2.82	2.78	7.43	2.07	2.53	1.56	3.61	2.19	3.54	35.53
1902	.87	1.20	2.93	1.56	4.97	9.04	4.26	4.71	3.31	2.11	4.22	3.89	43.07
1903	1.10	2.45	2.73	4.54	1.21	1.10	3.43	3.48	.71	2.24	.56	.29	23.84
1904	1.25	.....	.....	2.97	3.58	2.32	1.57	3.20	4.64	1.01	.30	2.26	.....
1905	1.26	2.03	1.98	3.75	4.91	.45	5.31	3.43	4.36	3.73	2.39	2.42	36.02
1906	4.99	.65	5.30	1.57	1.03	2.54	2.95	3.27	3.93	.42	3.80	3.29	33.74

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

PARIS, EDGAR COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1907	5.26	0.07	3.05	2.50	2.53	.....	.....	.....	0.70	2.79	3.47	3.10	.....
1908	1.53	5.11	4.64	5.57	9.27	2.48	2.75	.80	1.79	.20	3.05	1.12	38.31
1909	2.76	5.18	2.40	6.67	3.78	4.66	4.96	1.18	3.14	3.25	3.24	2.92	44.14
1910	2.60†	2.82	.23	3.59	4.13	3.00	5.30	1.63	4.66	3.90	2.65	1.25	35.76
1911	3.50	2.16	2.41	5.74	1.45	3.93	1.79	2.28	11.43	2.57	3.00	1.90	42.16
Means	2.24	2.44	2.94	3.52	3.94	3.71	3.27	2.75	3.43	2.18	3.30	2.36	36.07

† Interpolated.

PEKIN, TAZEWELL COUNTY, ILLINOIS

Elevation, 465 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1855	11.78	2.25	2.78	2.06	4.66	4.59	7.75	3.06	1.34	2.81	2.75	4.38	50.21
1856	.65	1.72	.50	.56	3.59	2.12	2.53	1.53	.72	2.94	4.03	7.00	27.89
1857	.41	6.31	2.80	2.21	2.97	3.63	2.20	5.76	1.99	1.39	1.48	1.45	32.60
1858	.95	1.55	3.73	7.66	11.49	6.96	8.62	3.31	3.78	3.32	6.18	3.15	60.70
1859	2.01	1.84	5.74	2.73	3.55	1.91	.45	3.77	2.77	1.91	2.53	1.09	30.30
1860	1.96	2.60	1.39	1.70	1.27	5.76	7.55	4.04	1.84	.89	3.80	3.60	36.40
1861	1.30	2.66	4.00	5.86	1.79	4.18	3.65	3.16	4.23	3.51	.....	1.51	.....
1862	5.46	.60	2.17	5.64	1.70	3.32	6.64	7.64	7.84	2.91	1.95	5.86	51.73
1863	3.25	.....	2.57	.....	3.63	.59	3.30	2.41	1.95	4.38	.94	6.19	.....
1864	1.60	.46	2.20	4.85	1.81	2.79	5.04	2.25	4.65	1.42	4.34	2.69	34.10
1865	.20	4.82	3.74	5.88	2.46	6.01	5.93	4.94	11.30	1.83	.....	.....	.....
1886	1.59	2.65	2.70	2.71	3.00	1.99	1.02	5.53	7.05	1.38	1.07	1.18	31.87
1887	2.16	6.68	1.10	2.30	1.56	3.10	2.79	3.77	3.40	2.23	1.88	5.79	36.76
1888	2.40	1.63	5.29	2.05	7.81	2.65	7.94	2.38	2.17	2.40	.....	2.00	.....
1889	2.15	2.10	2.02	2.54	3.47	7.70	4.15	1.02	2.62	2.25	4.90	1.16	36.08
1890	3.47	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	2.58	2.70	2.85	3.80	3.65	3.82	4.64	3.64	3.84	2.37	2.99	3.36	38.97

NOTE—Values for January, 1860-March 1864, inclusive, are for Orchard Farm about one mile out of Pekin.

PEORIA, PEORIA COUNTY, ILLINOIS

Elevation, 609 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1855	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.76	.....
1856	0.80	1.03	0.25	1.72	4.03	1.50	2.83	1.39	0.76	1.66	4.00	6.13	26.10
1857	.37	5.33	3.84	1.39	2.80	2.77	1.40	5.61	2.16	2.01	1.33	1.50	30.51
1858	1.48	1.95	3.28	6.25	10.64	5.95	5.75	3.24	2.96	3.24	4.85	3.67	53.26
1859	1.50	1.42	5.82	2.60	3.17	2.18	.67	4.14	2.84	2.15	2.40	1.23	30.12
1860	1.80	2.40	1.13	1.64	2.00	4.95	8.87	2.39	2.00	.70	3.13	3.08	34.15
1861	1.25	2.46	3.96	4.95	2.19	2.31	2.31	2.78	3.72	2.33	1.09	.94	30.29
1862	4.27	.70	2.71	5.03	1.46	3.67	7.74	9.04	5.09	1.61	1.81	5.20	48.33
1863	2.83	3.20	2.61	1.52	2.97	.45	4.82	2.24	2.51	3.92	.71	4.49	32.27
1864	1.42	.41	2.20	4.81	1.88	2.55	2.92	1.56	4.81	1.53	3.82	3.06	30.97
1865	.22	4.01	3.57	4.27	2.34	1.86	5.77	3.61	8.31	1.67	.31	1.08	37.02
1866	3.21	1.10	2.54	2.65	2.57	2.61	5.17	3.97	6.50	2.87	.51	2.05	35.75
1867	1.36	2.88	1.74	1.57	4.40	2.92	2.65	2.26	.60	1.10	1.93	1.21	24.62
1868	.77	.75	5.38	3.18	7.85	1.43	1.47	2.74	4.46	1.41	4.50	1.81	35.75
1869	.99	2.62	1.71	3.59	6.09	8.35	7.35	3.39	.74	1.53	3.13	2.63	42.12
1870	2.05	.33	4.37	.45	1.62	.75	.68	3.26	3.56	4.27	1.21	1.02	23.57
1871	2.45	1.62	3.24	2.58	1.93	3.47	3.76	4.95	.65	3.37	2.09	2.04	32.15
1872	.20	.69	2.50	2.95	2.38	9.76	7.80	4.54	4.13	.80	2.00	1.07	38.82
1873	3.47	1.29	1.30	4.76	4.78	2.96	4.25	1.25	3.65	2.26	1.46	7.15	38.58
1874	3.04	1.45	1.11	2.90	2.51	1.95	1.46	5.60	1.15	1.00	2.20	.67	25.04
1875	.32	2.20	2.05	2.00	4.23	3.00	8.28	1.02	9.63	3.46	.71	2.39	39.29

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

PEORIA, PEORIA COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1876	2.60	2.00	4.70	2.66	3.94	6.17	5.54	3.14	4.51	4.86	2.63	.28	43.03
1877	.92	.06	3.32	2.86	2.57	9.43	3.01	2.04	2.83	5.68	3.65	3.45	39.82
1878	.50	2.25	2.10	3.75	4.45	3.49	2.58	4.42	.97	3.96	.91	2.08	31.46
1879	1.05	.97	1.80	2.95	.93	3.23	3.42	1.88	3.72	2.17	4.93	1.92	28.97
1880	3.38	3.95	3.30	5.94	6.73	2.32	3.17	3.38	3.09	1.75	1.92	.96	39.89
1881	.52	3.51	3.52	1.62	3.50	7.20	2.43	1.38	4.05	5.56	4.26	3.50	41.05
1882	1.27	3.21	3.12	2.41	6.34	11.18	2.91	1.92	1.53	3.76	2.08	1.76	41.49
1883	1.31	4.14	.77	6.18	6.54	4.39	3.57	.57	2.93	3.57	4.19	1.37	39.53
1884	.70	3.18	2.17	2.62	5.50	3.87	3.67	4.13	5.76	4.80	2.19	3.21	41.80
1885	2.63	.87	.24	4.44	1.70	4.07	4.73	2.64	5.28	2.32	1.04	2.44	32.40
1886	2.41	1.86	2.25	2.75	2.90	3.67	.47	3.57	4.68	1.81	1.34	.89	28.60
1887	1.10	5.45	.94	1.53	1.24	1.53	2.85	2.72	2.53	2.14	1.62	3.65	27.30
1888	1.87	1.66	4.03	1.18	6.72	1.84	6.48	2.30	4.79	2.29	2.67	2.39	38.22
1889	1.70	.84	1.50	2.79	3.92	6.30	7.64	1.23	2.61	2.28	2.91	1.33	35.05
1890	2.80	1.36	2.73	2.33	2.74	2.42	.72	2.39	2.12	3.45	1.79	.41	25.26
1891	1.68	1.90	2.68	3.64	1.97	3.31	2.82	5.71	2.00	.71	4.08	2.39	32.89
1892	1.25	1.84	2.45	4.54	7.70	6.05	3.08	.73	2.35	1.20	2.72	1.75	35.66
1893	.87	2.92	3.01	7.86	4.65	1.82	2.48	.44	3.02	.70	2.21	1.74	31.72
1894	2.60	1.48	3.06	2.22	3.58	4.18	1.00	2.50	4.42	1.45	2.92	1.58	30.99
1895	1.32	.37	1.02	2.89	1.84	1.67	8.72	2.27	4.92	.67	4.17	5.86	35.72
1896	1.30	1.95	1.05	4.47	5.74	2.23	7.02	4.69	4.86	.23	2.20	.40	36.14
1897	5.39	1.19	4.70	2.87	1.29	2.11	4.65	1.02	.93	.04	3.48	1.16	28.83
1898	4.08	2.59	5.74	3.02	5.54	3.37	.47	3.26	6.05	3.00	2.03	.93	40.08
1899	.72	1.96	2.97	1.36	6.03	2.60	1.69	1.27	5.24	2.78	2.25	2.12	30.99
1900	1.92	5.64	1.42	1.09	5.54	1.44	2.45	5.39	2.94	2.90	1.87	.39	32.99
1901	1.98	1.24	4.31	.81	1.50	4.32	3.97	1.29	2.64	.90	.80	2.26	26.02
1902	.67	1.41	2.71	2.29	2.99	9.60	7.30	7.42	6.78	3.78	2.83	1.54	49.32
1903	.89	1.70	3.66	5.15	4.22	2.39	4.91	7.22	5.78	2.13	.85	.95	39.85
1904	1.87	1.29	4.42	3.48	4.06	2.44	5.58	4.13	6.67	.10	.12	1.33	35.49
1905	1.15	1.45	2.00	3.99	4.53	5.13	4.24	1.36	1.78	2.77	2.45	1.60	32.45
1906	1.70	1.85	2.55	2.77	2.88	3.24	2.48	1.59	4.92	1.00	2.42	1.65	29.05
1907	5.39	.14	2.34	2.82	2.08	3.99	4.89	6.60	2.94	.35	1.68	1.66	34.88
1908	.59	3.98	2.50	4.08	7.76	4.09	3.94	2.78	.82	.71	1.89	.82	33.96
1909	1.55	3.67	1.81	7.17	3.72	3.56	4.57	.79	3.68	3.59	5.53	2.50	42.14
1910	1.97	1.10	.52	3.56	4.49	.78	3.23	.68	3.12	1.69	.79	1.25	23.18
1911	2.37	2.39	2.64	2.69	1.03	6.64	2.58	1.73	12.30	2.65	3.01	2.13	42.16
Means	1.77	2.06	2.66	3.21	3.83	3.77	3.95	3.03	3.75	2.26	2.35	2.14	34.78

PETERSBURGH, MENARD COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1882	.....	.....	.....	.....	.....	.....	2.79	.....	.....	.....	.....	.....	.....
1883	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1884	0.23	3.20	1.85	0.20	4.85	9.35	3.22	1.95	4.25	2.30	2.82	2.50	36.72
1885	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	.....	1.97	1.84	3.20	2.00	1.65	.....	2.05	3.75	.20	.50	.82	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1889	.....	.....	2.50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	.....	2.58	2.06	1.70	3.42	5.50	3.00	2.00	4.00	1.25	1.66	1.66	.....

PHILO, CHAMPAIGN COUNTY, ILLINOIS

Elevation, 700 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1885	.....	.....	.....	.....	3.57	5.12	3.34	2.12	4.32	4.41	.....	.....	.....
1886	2.28	.71	3.90	2.55	3.36	5.33	3.25	3.36	7.75	.40	2.80	1.58	37.27
1887	.81	2.94	2.62	3.37	5.00	1.50	.98	2.77	4.26	.81	2.96	4.05	32.07
1888	2.67	2.05	2.77	2.62	6.68	5.11	8.86	.35	1.18	4.50	4.41	2.12	43.32
1889	1.23	2.19	1.36	1.04	5.88	11.16	4.47	.84	2.64	3.21	3.48	2.04	39.54
1890	6.35	3.47	2.35	3.95	3.84	5.14	2.02	1.81	1.50	2.22	2.36	.13	35.14

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

PHILO, CHAMPAIGN COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1891	.89	2.10	4.32	2.46	1.14	3.15	1.52	4.21	.59	.82	6.14	1.55	28.89
1892	1.69	3.71	2.21	7.79	7.43	2.81	3.10	4.29	1.16	.50	4.92	1.80	41.41
1893	1.02	4.51	3.87	8.28	6.38	1.67	.66	.46	3.65	.65	3.48	1.28	35.91
1894	2.38	3.28	3.04	3.63	2.20	4.44	2.53	1.22	5.02	.76	2.13	2.19	32.82
1895	1.08	1.28	1.08	2.38	.82	2.73	3.01	1.28	3.72	.85	3.24	4.99	26.46
1896	1.06	1.57	.77	1.38	3.99	3.45	7.27	6.41	5.02	.20	3.41	.83	35.36
1897	4.25	1.56	3.68	3.48	1.97	6.22	3.48	1.20	.45	.54	5.08	2.65	34.56
1898	3.62	1.28	8.71	2.84	4.93	3.78	1.98	2.29	5.23	5.55	3.20	2.23	45.64
1899	2.50	2.31	2.31	.87	4.44	2.60	1.82	2.93	.50	4.22	2.16	2.56	29.22
1900	.16	4.13	1.89	.82	6.19	4.55	6.35	6.88	1.64	2.26	3.56	1.34	39.77
1901	2.01	1.99	3.11	1.80	2.66	5.72	3.73	2.44	1.19	3.57	1.36	3.75	33.33
1902	1.02	1.56	3.18	1.47	2.23	7.38	5.59	5.39	4.06	3.39	3.28	3.12	41.62
1903	1.45	3.16	1.45	5.50	2.32	3.36	3.49	2.39	1.77	2.87	2.04	2.20	32.00
1904	3.17	1.25	6.57	4.06	3.05	2.71	2.17	5.65	3.17	.53	.35	.76	33.44
1905	2.18	1.68	1.10	3.79	4.62	3.54	6.00	1.31	4.79	3.11	1.01	1.87	35.00
1906	2.55	1.86	4.38	1.65	4.37	2.48	4.87	2.20	3.80	1.74	4.75	3.93	38.58
1907	7.60	.16	4.22	2.42	3.43	5.98	6.08	4.03	.58	2.18	2.27	3.46	42.41
1908	1.79	4.25	3.37	4.17	7.65	1.79	2.64	2.42	1.59	.35	3.27	1.32	34.61
1909	2.54	5.11	1.23	7.73	2.83	3.80	8.16	2.88	2.68	3.21	2.96	2.37	45.50
1910	2.26	1.84	.23	2.80	5.41	2.05	3.75	2.18	4.65	2.63	2.69	1.60	32.09
1911	2.24	1.76	2.09	4.11	.84	2.41	2.73	2.63	8.92	3.95	2.82	1.56	36.06
Means	2.34	2.37	2.91	3.34	4.34	3.70	3.85	2.81	3.18	2.20	3.10	2.20	36.28

PLUMHILL, WASHINGTON COUNTY, ILLINOIS

Elevation, 500 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1895	.....	.....	.....	.....	.....	.....	.....	2.83	2.49	0.40	3.29	4.51	.....
1896	0.91	2.50	2.99	2.18	6.96	4.20	5.56	.44	5.88	1.72	*4.15	.45	38.02
1897	3.86	2.54	9.43	5.13	1.53	4.51	3.91	.58	.50	.35	5.48	3.69	41.51
1898	4.79	2.06	13.05	3.90	5.12	5.32	6.02	3.98	3.93	5.34	2.29	1.79	57.59
1899	2.48	3.32	2.86	1.42	6.19	3.76	6.12	1.70	.55	3.32	3.12	2.46	37.30
1900	.46	3.69	1.88	2.20	4.86	5.27	2.47	.85	2.32	1.90	3.33	1.12	30.35
1901	1.29	2.11	3.12	2.27	1.34	2.14	3.17	2.48	1.02	†2.74	2.11	4.23	28.02
1902	1.21	.58	4.18	1.94	3.58	5.04	1.88	5.04	3.70	1.17	3.76	4.10	36.18
1903	1.28	2.89	2.98	3.13	2.31	1.94	2.28	3.43	.....	.....	1.44	1.68	.....
1904	2.26	1.41	7.65	4.49	2.85	5.93	5.14	4.27	6.83	.72	.94	.81	43.30
1905	1.72	1.45	3.22	4.34	4.06	2.97	9.46	5.03	4.73	5.67	2.02	2.65	47.32
1906	4.05	2.16	4.14	2.00	1.00	2.20	.....	.....	.....	.....	.....	.....	.....
Means	2.21	2.25	5.05	3.00	3.62	3.93	4.60	2.78	3.20	2.33	2.90	2.41	39.95

* Three days missing.
† Five days missing.

POLO, OGLE COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1882	.....	.....	.....	.....	.....	.....	3.23	3.77	1.49	3.26	1.62	0.33	.....
1883	1.58	3.43	0.32	2.90	6.14	4.33	5.04	.97	1.61	5.42	4.03	1.56	37.33
1884	1.45	2.43	2.17	.....	2.77	4.50	6.39	2.81	5.03	.....	.....	.....	.....
1885	.....	.....	.....	4.52	2.31	.....	.....	.....	.....	.....	.....	.....	.....
Means	1.52	2.93	1.24	3.71	3.74	4.42	4.89	2.52	2.71	4.34	2.82	.94	.....

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

PONTIAC, LIVINGSTON COUNTY, ILLINOIS

Elevation, 546 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov	Dec.	Annual
1885	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.90	0.60	2.79	.....
1886	0.75	.....	2.50	1.90	2.99	1.28	0.82	0.80	4.28	.32	.68	.55	.....
1887	.92	3.85	1.11	1.20	1.15	.28	.13	1.60	1.01	.93	.77	3.20	16.15
1888	1.40	1.43	2.38	.90	5.70	3.85	4.32	.65	.47	2.35	1.37	1.20	26.02
1889	1.39	.97	1.53	1.35	5.50	2.45	4.65	.11	3.80	1.62	3.10	1.65	28.12
1890	4.18	1.20	3.58	4.15	3.65	5.10	.75	1.95	.35	2.61	1.45	.30	29.27
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1903	.80	3.23	2.54	4.94	4.36	1.39	6.35	2.60	3.62	2.76	1.06	1.98	35.63
1904	3.92	1.84	5.73	3.63	2.67	1.95	5.37	2.45	5.79	.17	.06	2.14	35.72
1905	1.80	1.89	2.17	3.45	6.33	1.70	1.78	1.82	2.26	2.53	2.26	1.71	29.70
1906	3.07	1.78	3.28	2.18	1.77	2.35	2.39	.80	3.56	1.61	2.58	2.62	27.99
1907	5.62	.15	2.74	3.09	3.28	3.00	5.66	4.47	4.59	.61	2.04	3.05	38.30
1908	1.01	4.52	2.90	4.83	8.72	1.65	2.35	1.25	1.53	.92	2.61	1.51	33.80
1909	2.58	4.30	1.87	5.90	3.05	2.90	2.29	3.75	2.15	2.33	4.00	3.32	38.44
1910	1.78	.97	.20	4.07	5.04	2.14	1.25	4.39	4.10	1.69	.82	1.73	28.18
1911	2.06	2.13	2.32	3.70	2.26	2.84	1.52	2.25	11.81	2.68	2.95	2.20	38.72
Means	2.22	2.18	2.49	3.23	4.04	2.35	2.83	2.06	3.52	1.67	1.76	2.00	31.28

PRAIRIEVILLE, LEE COUNTY, ILLINOIS

Elevation, 725 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1881	1.00	6.75	5.41	2.18	1.50	9.07	2.18	1.25	4.45	8.20	3.37	3.06	48.42
1882	1.50	1.67	4.50	6.36	4.66	4.50	4.32	3.52	1.44	3.56	1.68	2.35	40.06
1883	2.74	4.94	.72	2.25	7.01	4.81	5.00	1.56	3.00	5.03	5.95	2.43	45.44
1884	1.30	2.75	2.03	1.89	4.50	3.35	10.60	4.06	5.80	6.24	2.54	5.56	50.02
1885	2.18	1.60	.21	4.01	.....	4.92	2.78	.....	5.10	2.71	1.55	3.86	28.92
1886	4.29	2.79	3.68	3.60	6.32	.....	.32	1.33	2.94	.....	1.41	1.32	.....
1887	4.21	4.89	1.66	1.10	2.51	2.03	2.35	3.92	3.62	3.76	1.46	9.02	40.53
1888	2.55	1.40	1.89	1.77	7.08	.....	.....	.....	.....	.....	.....	.....	.....
Means	2.47	3.35	2.51	2.90	4.80	4.78	3.94	2.61	3.76	4.92	2.57	3.94	42.33

RANTOUL, CHAMPAIGN COUNTY, ILLINOIS

Elevation, 768 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1891	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.01	1.19	.....
1892	0.96	2.41	2.28	6.04	8.17	4.38	3.51	1.56	0.93	0.62	4.56	1.39	36.81
1893	1.60	3.57	2.60	7.23	3.89	1.11	.38	.20	4.38	.76	2.19	2.25	30.16
1894	1.91	1.77	2.75	3.58	4.39	2.37	.41	2.45	5.21	.39	1.58	1.16	27.97
1895	1.34	.65	.95	2.55	1.41	3.40	7.47	1.39	5.42	.47	3.25	6.82	35.12
1896	.86	1.38	.87	1.68	4.95	4.08	6.86	3.83	5.73	.22	2.25	.30	33.01
1897	3.88	1.18	3.41	3.54	2.23	6.73	5.39	.58	.68	.58	3.80	2.32	34.32
1898	3.46	1.76	7.20	2.04	5.94	4.99	1.87	3.87	3.86	4.58	3.28	1.98	44.83
1899	2.23	1.66	3.49	.88	5.81	1.81	3.10	2.61	2.59	4.50	1.65	1.58	31.91
1900	.18	2.48	2.72	.92	4.69	7.31	5.96	5.91	5.53	2.32	2.82	.93	41.77
1901	1.57	1.54	3.98	1.42	4.38	4.83	.51	4.37	2.71	3.32	1.62	3.49	33.75
1902	.77	1.90	3.09	2.72	3.29	13.54	5.69	6.09	4.73	2.85	2.37	2.96	50.00
1903	1.14	3.23	1.40	6.26	3.77	6.13	2.73	4.66	1.25	1.85	1.34	2.62	36.28
1904	3.95	1.38	6.78	4.62	3.29	1.11	6.60	3.16	3.39	.76	.10	1.25	36.39
1905	1.85	1.50	1.31	3.70	4.01	2.68	4.73	2.60	3.75	3.34	2.62	1.58	33.67
1906	3.47	1.50	4.09	2.23	2.51	2.30	3.49	5.75	4.74	2.00	4.91	3.08	40.07
1907	5.69	.08	3.54	2.19	3.08	5.45	6.17	6.21	2.26	1.39	2.17	2.71	40.94
1908	1.49	4.66	3.00	4.83	10.66	1.71	2.17	1.88	1.43	.38	2.70	1.66	36.58
1909	2.18	5.34	1.57	7.64	3.75	3.77	3.27	1.81	2.36	2.40	3.51	2.36	39.96
1910	2.50	1.54	.43	2.72	6.56	2.08	2.58	2.13	4.57	1.45	.80	1.57	28.93
1911	2.73	1.56	2.18	4.53	1.91	1.92	2.26	5.19	7.91	3.11	3.24	1.73	38.27
Means	2.19	2.05	2.88	3.57	4.44	4.09	3.75	3.31	3.67	1.86	2.66	2.09	36.54

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

REYNOLDS, ROCK ISLAND COUNTY, ILLINOIS

Elevation, 800 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1895	.....	.....	.....	.....	.....	.....	.....	.....	3.04	0.65	1.02	3.39	.....
1896	0.92	1.17	1.10	5.34	5.69	2.65	6.09	3.76	4.44	1.74	.65	.93	34.48
1897	3.54	1.42	2.59	3.84	1.86	1.67	4.05	.72	2.99	.45	1.35	1.42	25.90
1898	2.70	1.30	5.52	2.89	3.44	3.21	1.15	7.78	2.76	3.52	1.34	.50	38.41
Means	2.39	1.30	3.07	4.02	3.66	2.51	3.76	4.09	4.41	1.67	1.09	1.56	32.93

RICHVIEW, WASHINGTON COUNTY, ILLINOIS

Elevation, 580 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1885	.....	.....	.....	.....	.....	.....	2.64	3.07	4.03	4.69	3.04	3.75	.....
1886	3.24	1.54	3.85	2.97	4.07	4.69	1.36	4.62	.95	4.85	6.05	3.41	41.60
1887	1.52	4.80	5.42	3.90	3.18	2.08	2.22	4.25	2.24	1.50	5.74	4.14	40.99
1888	2.17	3.90	4.22	2.26	3.24	6.54	1.88	7.42	3.26	2.99	4.87	2.24	44.99
1889	3.27	2.88	2.86	1.27	4.72	10.04	6.20	1.64	4.60	1.66	.....	.....	.....
Means	2.55	3.28	4.09	2.60	3.80	5.84	2.86	4.25	3.80	2.36	4.92	3.38	42.53

RILEY, M'HENRY COUNTY, ILLINOIS

Elevation, 956 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1850	2.59	0.50	2.83	2.81	2.90	7.42	7.15	15.73	2.58	3.30	3.30	1.94	53.05
1851	2.16	3.43	.55	3.35	15.46	5.52	5.51	9.85	3.40	3.41	1.63	2.63	56.90
1852	3.39	.84	6.75	5.99	4.75	2.18	3.49	1.01	2.91	4.98	2.43	3.30	42.02
1853	1.25	2.85	2.00	5.68	4.37	4.85	8.10	1.68	6.14	.50	6.85	1.10	45.37
1854	1.15	1.60	1.85	.60	.....	.....	.....	.....	.....	.....	.....	.....	.....
1855	.....	.....	.....	.....	1.74	4.60	3.09	1.38	2.31	2.80	1.60	1.95	.....
1856	.60	3.95	.50	4.04	3.92	2.54	2.10	2.92	2.61	2.09	2.97	3.18	31.42
1857	1.14	5.29	4.88	2.70	3.45	4.70	2.26	6.53	4.32	2.02	.44	.28	38.01
1858	1.95	.10	2.99	3.40	7.64	8.00	3.71	7.53	5.81	3.43	4.17	1.54	50.27
1859	1.24	2.06	6.71	2.82	2.93	2.08	1.85	.97	2.60	.70	4.86	.75	29.57
1860	1.43	.90	1.05	2.05	4.58	4.67	3.26	1.59	5.22	1.54	1.69	1.87	29.85
1861	1.35	1.74	2.95	.39	4.49	2.15	3.64	4.56	6.38	2.61	1.22	1.68	33.16
1862	2.93	.60	1.53	3.29	3.95	3.54	9.99	4.04	5.90	1.31	1.16	1.31	39.55
1863	3.13	1.04	2.01	1.70	3.46	.41	2.27	2.52	1.56	3.06	1.85	2.56	25.57
1864	.45	.15	1.25	1.63	2.75	1.30	6.37	1.13	1.57	2.28	2.27	2.76	23.91
1865	.45	.60	2.62	2.93	.88	4.39	3.78	8.04	3.59	1.98	.72	.74	30.72
1866	2.54	.70	2.58	2.57	2.61	3.98	3.19	8.09	7.91	2.20	.59	3.84	38.80
1867	2.20	.62	1.00	1.80	4.98	4.72	4.72	3.41	1.48	.29	1.68	1.03	27.93
1868	1.57	.95	5.40	6.06	4.21	9.17	1.30	5.29	6.67	1.30	3.18	1.38	46.48
1869	2.11	2.68	1.76	2.43	4.80	9.68	5.39	4.96	2.59	.88	2.50	2.71	42.49
1870	2.28	.59	4.43	1.51	.54	.99	4.66	3.79	5.36	3.14	.69	1.50	29.48
1871	2.82	1.30	2.23	2.05	2.32	5.17	1.04	3.07	.68	2.97	2.25	1.93	27.83
1872	.45	.42	2.78	3.47	3.41	3.18	4.38	3.31	8.89	.62	1.47	.93	33.31
1873	2.14	.33	1.56	2.40	5.23	2.59	2.61	1.98	2.34	2.21	1.55	3.42	28.36
1874	3.76	.95	1.93	2.02	2.04	2.96	1.09	2.75	2.58	2.31	1.48	.48	24.35
1875	1.38	1.95	1.01	2.33	3.28	5.26	4.24	2.14	7.29	2.76	.72	2.32	34.68
1876	3.01	3.51	3.42	2.09	3.76	4.57	7.64	1.52	4.70	.97	3.67	.71	39.57
1877	1.72	.03	5.53	2.81	.93	4.83	1.96	3.60	.21	6.57	2.90	3.38	34.47
1878	.85	1.33	2.72	2.89	4.25	2.46	4.73	3.52	1.46	4.71	1.06	2.46	32.44
1879	.85	1.54	1.15	2.30	4.97	4.81	5.68	1.96	1.20	1.38	5.30	1.47	32.61
1880	4.14	1.62	1.40	3.10	2.68	5.28	2.68	4.24	4.02	2.37	1.01	.75	33.29
1881	1.54	5.28	6.48	.98	3.10	5.62	5.88	1.01	5.47	6.81	2.36	2.69	47.22
1882	1.57	2.15	4.58	3.29	3.59	4.42	3.63	2.08	2.36	4.17	1.52	2.00	35.36
1883	2.18	4.61	.89	2.00	6.18	3.92	2.94	1.17	2.04	4.28	4.03	1.67	35.91

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

RILEY, M'HENRY COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1884	.80	2.20	1.51	2.85	2.56	4.22	4.19	3.36	4.34	3.85	1.79	3.28	34.95
1885	2.32	1.92	.29	3.97	1.72	5.80	2.07	6.80	3.86	2.57	2.09	2.37	35.78
1886	3.60	1.61	3.68	3.76	3.13	1.89	.81	5.85	2.25	2.55	.98	1.13	31.24
1887	3.59	4.82	1.01	1.55	.95	1.23	2.70	4.85	4.61	2.75	1.87	3.31	33.24
1888	1.24	1.17	2.34	2.16	4.48	.81	3.44	4.23	1.00	1.70	1.97	1.87	26.41
1889	1.86	1.21	1.56	2.48	4.09	3.25	3.44	.77	1.68	.40	2.34	1.44	24.52
1890	2.65	1.52	2.14	2.88	4.33	9.64	.53	3.83	.67	5.38	1.74	1.13	36.44
1891	2.22	1.65	1.64	4.05	4.38	5.06	2.40	1.95	.87	1.16	3.75	2.16	31.29
1892	1.73	1.22	1.49	2.83	11.05	11.21	3.76	4.42	1.43	.72	1.64	1.71	43.21
1893	1.57	1.55	1.82	3.71	2.99	5.13	2.32	.45	4.18	2.47	2.34	1.42	29.95
1894	2.24	1.33	3.02	2.62	3.62	1.22	.31	1.33	15.73	1.57	2.06	.44	35.49
1895	2.09	.46	1.32	1.81	2.91	1.68	3.43	3.94	2.16	.41	2.69	3.00	25.90
1896	.61	1.56	1.85	2.97	5.04	3.02	3.29	2.15	9.45	.38	1.77	.42	32.52
1897	4.45	1.49	3.87	2.59	1.08	3.23	1.57	1.24	1.15	.48	2.52	1.50	25.17
1898	3.89	3.03	4.76	1.90	2.74	7.74	2.27	4.35	2.16	3.41	1.64	.76	38.65
1899	.44	1.21	1.65	.76	4.61	2.56	4.64	2.36	1.59	1.72	1.44	1.56	23.94
1900	1.48	3.12	1.35	1.36	3.08	2.43	6.03	7.09	2.58	2.74	2.00	.42	33.68
1901	1.38	1.69	3.38	.26	1.10	2.37	3.23	1.15	2.01	.86	1.05	1.22	19.70
1902	.55	1.42	2.31	1.31	6.16	6.83	7.78	1.00	3.58	2.90	2.87	2.35	39.06
1903	.80	1.33	3.47	3.36	3.29	1.65	4.61	6.52	5.43	1.97	.82	1.66	35.91
1904	1.79	1.43	3.98	2.27	2.81	1.52	3.35	3.32	4.79	1.28	.15	1.35	28.04
1905	.82	1.69	2.73	3.31	7.46	6.32	3.30	5.85	2.38	3.89	1.57	1.40	40.72
1906	2.73	1.96	1.94	1.20	2.83	1.95	1.25	4.90	4.05	1.79	2.52	1.47	28.59
1907	3.67	.38	1.68	3.09	4.29	4.84	4.92	3.55	4.90	.50	1.20	1.16	34.18
1908	.77	2.63	4.66	4.05	6.87	3.82	2.68	2.21	.47	.96	1.66	.99	31.77
1909	2.50	2.58	1.10	7.70	1.62	3.37	.63	6.25	3.37	.72	3.91	5.05	38.80
1910	2.23	.55	.24	3.32	4.42	.80	1.09	3.68	2.57	1.51	1.27	.80	22.48
1911	.96	2.10	.68	3.83	2.64	3.17	1.21	7.35	4.40	2.16	4.70	1.70	34.90
Means	1.92	1.72	2.51	2.73	3.86	4.08	3.53	3.81	3.65	2.27	2.16	1.79	34.17

ROCK ISLAND, ROCK ISLAND COUNTY, ILLINOIS

Elevation, 528 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1866	.....	0.49	2.03	.....	3.87	.....	.....	.....	4.05	1.31	0.33	1.82	.....
1867	0.82	2.81	1.31	1.79	5.48	2.89	3.52	3.40	3.61	.86	2.19	.53	29.21
1868	.07	.51	5.09	5.92	7.76	2.52	2.57	2.28	3.01	1.63	2.45	.50	34.29
1869	1.49	1.13	.21	3.29	3.84	7.15	7.98	5.69	1.81	1.32	7.29	2.62	43.82
1870	.....	3.95	17.71	.34	1.26	1.19	1.40	3.70	4.74	2.84	1.04	.66	38.83
1871	3.01	3.25	1.54	2.86	1.04	3.85	1.83	3.81	.23	3.34	2.29	5.68	32.73
1872	.38	.22	1.04	2.00	3.65	2.58	3.80	7.60	3.67	.16	1.26	.29	26.65
1873	2.75	.30	.46	4.05	3.45	.95	1.35	.28	.52	1.25	1.06	3.20	19.62
1874	3.10	.45	.90	1.27	2.93	3.43	1.78	2.64	6.15	.50	1.03	.18	24.36
1875	.20	.65	.35	1.10	1.18	5.20	7.37	1.32	4.08	.85	.35	4.16	26.87
1876	2.18	2.65	2.87	3.40	6.10	4.40	2.30	3.84	4.05	1.20	2.70	.20	35.89
1877	1.10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1880	.....	.....	.....	.....	3.26	6.71	4.58	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1884	.43	.54	1.35	.....	4.91	.....	.....	.....	.....	.....	.....	7.59	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1889	4.20	1.45	2.31	4.18	5.55	4.93	8.59	1.07	4.29	1.15	2.35	1.56	41.63
1890	3.06	1.91	3.20	.99	5.03	5.28	1.24	2.09	3.40	4.38	1.71	1.20	33.49
1891	2.84	1.01	2.53	3.46	2.71	3.65	3.09	5.74	1.48	1.47	3.47	1.30	32.75
1892	*1.31	*1.39	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	1.68	1.42	2.86	2.66	3.88	3.91	3.67	3.34	3.22	1.59	2.11	2.10	32.32

* Values for "Rock Island," all other values for "Rock Island Arsenal".

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

ROCKFORD, WINNEBAGO COUNTY, ILLINOIS
Elevation, 763 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1872												0.76	
1873	1.80	0.50	1.56	1.50	4.75	3.00	1.60	1.65	1.55	2.70	1.60	2.55	24.76
1874	4.87	.83	1.01	1.23	1.09	3.39	.90	1.19	5.97	1.00	1.73	.59	23.90
1875	.75	1.56	.59	3.06	2.25	6.21	5.96	2.15	3.56	2.34	.51	2.57	31.51
1876	3.46	2.91	2.84	3.83	6.06	4.25	5.80	2.42	4.71	1.50	4.37	.41	42.56
1877	3.06	.30	5.53	3.99	2.20	4.32	1.96	4.04	.61	6.15	3.90	2.00	38.06
1878	.56	1.52	3.63	3.44	4.20	3.48	5.75	1.99	.78	6.03	.78	1.48	33.64
1879	.71	1.32	.91	2.76	2.19	3.63	6.98	3.06	.40	1.93	5.35	1.18	30.42
1880	3.17	1.92	2.70	4.53	4.11	3.88	1.74	2.98	3.51	1.20	1.73	.60	32.07
1881	1.71	6.50	3.49	1.38	2.39	6.44	7.72	.33	3.72	5.37	2.17	2.99	44.21
1882	1.19	2.01	3.54	5.15	3.42	5.69	2.96	3.82	.93	3.32	2.24	2.49	36.76
1883	1.98	3.76	.57	1.96	6.39	4.21	3.69	1.50	.92	6.66	3.87	1.58	37.09
1884	1.42	1.91	2.88	3.45	3.43	6.16	6.13	3.68	3.85	6.24	1.99	6.51	47.65
1885	2.39	2.50	.26	4.33	2.39	5.47	4.50	9.18	4.64	3.95	1.96	3.57	45.14
1886	5.88	3.40	4.55	4.36	4.93	2.74	.35	8.41	2.25	4.03	1.61	1.65	44.16
1887	4.21	6.44	1.25	.92	1.98	.89	3.12	4.42	3.75	2.09	1.39	5.01	35.47
1888	1.72	1.30	3.03	2.54	6.25	1.27	4.90	1.99	1.05	1.80	2.39	2.58	30.82
1889	2.96	1.51	1.31	2.88	6.64	3.93	2.02	.74	1.95	.67	2.38	2.88	29.88
1890	2.81	2.69	2.42	3.76	5.28	12.33	.83	3.38	.60	5.98	2.23	1.60	43.91
1891	2.72	1.65	3.21	4.83	2.75	4.87	2.27	1.44	.75	1.53	3.67	1.30	30.99
1892	3.72	1.95	1.61	4.71	9.18	14.16	4.32	7.26	1.61	.78	2.53	2.96	54.79
1893	3.39	2.45	3.21	5.38	3.09	4.51	3.49	1.13	2.82	3.60	1.71	1.71	36.49
1894	1.47	2.06	3.26										
1895	2.27	.93	2.53	1.51	3.54	1.93	2.53	3.06	2.77	1.32	3.34	2.59	28.32
1896	.90	2.40	2.02	4.08	6.31	2.34	4.36	3.75	8.33	.85	3.05	.90	39.29
1897	4.72	1.45	4.90	3.81	1.12	4.09	2.71	.90	1.18	.68	1.73	1.62	28.91
1898	2.97	2.52	4.21	2.16	4.36	2.79	2.32	5.46					
1899				1.61	6.91	2.13	5.69	2.34	1.61				
1900				2.74		2.73		9.22	3.70				
1901					2.14	3.72	2.75	1.16	2.85				
1902				.84	8.30	7.74	5.76	1.14	6.43				
1903				3.95	2.53	1.62	5.49	7.59	5.39				
1904				2.20	3.38			4.06	3.39				
1905				2.70	6.13			3.75	1.16	3.90	2.33	.93	
1906	3.29	2.28	3.35	1.49	2.42	4.37	3.91	3.23	4.69	2.19	3.39	1.70	36.31
1907	3.18	.69	1.90	2.78	2.96	.54	.63	2.80	4.84	.82	.98	.17	30.29
1908	1.32	2.40	4.54	3.34	6.58	3.23	3.67	1.87	.92	.89	2.39	.79	31.94
1909	2.79	2.31	1.13	6.01	4.78	3.81	.68	7.69	3.41	.75	4.15	3.48	40.99
1910	2.06	.80	.27	3.50	4.76	.72	1.91	3.66	2.12	1.03	1.44	.60	22.87
1911	.74	2.95	.55	5.57	2.98	2.39	.81	8.70	6.56	2.86	4.30	1.91	40.32
Means	2.50	2.18	2.54	3.29	4.17	4.38	3.54	3.71	3.53	2.80	2.49	1.99	35.78

* Estimated.

ROBINSON, CRAWFORD COUNTY, ILLINOIS
Elevation, 500 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1896	1.00	2.15	1.85	1.15	3.93	4.33	7.10	1.80	4.68	0.96	4.92	0.68	34.55
1897	4.08	2.72	11.33	6.41	3.67	3.69	2.79	.41	.37	.53	7.85	4.35	48.21
1898	5.30	1.73	14.01	4.84	4.12	4.28	1.78	3.97	10.09	4.50	2.52	1.74	58.88
1899	3.77	3.12	4.03	.65	5.87	3.04	4.18	2.04	.37	3.45	2.62	3.37	36.51
1900	.45	3.69	1.76	1.11	5.26	6.98	5.62	1.88	5.01	2.41	3.82	1.24	39.73
1901	1.09	2.00	3.95	3.16	1.75	5.14	.71	2.86	1.37	3.74	1.70	5.18	31.85
1902	1.05	.95	2.98	2.78	3.10	6.34	2.22	6.49	2.72	1.65	3.61	4.14	37.83
1903	2.80	5.10	3.81	8.01	.70	3.01	4.90	5.37	1.04	2.48	1.39	3.29	41.90
1904	4.82	2.24	11.98	2.61	5.66	3.78	4.85	4.08	5.21	.46	.92	4.50	51.11
1905	1.87	1.77	2.24	3.86	4.86	2.10	6.20	5.10	3.68	6.95	1.73	2.88	43.24
1906	4.47	1.83	4.29	1.74	2.87	1.81	2.81	5.26	3.55	1.99	4.81	4.47	39.90
1907	8.09	2.67	5.47	4.34	6.71	3.42	6.03	4.73	1.74	3.17	3.30	3.66	53.33
1908	1.89	5.78	3.92	4.66	9.83	2.90	3.08	2.26	2.00	.14	3.78	1.18	41.42
1909	3.00	5.66	3.80	3.55	3.96	8.75	8.04	.80	3.85	3.18	3.86	2.90	51.35
1910	2.25	3.35	.32	2.63	3.55	2.29	9.60	1.65	5.84	4.05	2.48	1.88	39.89
1911	2.77	2.24	2.60	5.98	1.72	4.87	2.13	2.66	12.52	4.65	*2.26	*2.94	47.34
Means	3.04	2.94	4.90	3.60	4.22	4.17	4.51	3.21	4.00	2.77	3.22	3.06	43.56

* Values for Palestine.

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

ROSE HILL, COOK COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1895	.....	.....	.....	.....	.....	.....	7.72	4.68	3.51	0.05	2.87	5.05	.....
1896	1.65	1.40	2.93	2.11	.....	.....	7.82	4.24	6.93	1.25	6.92	1.30	.....
1897	4.45	4.52	10.40	6.30	4.10	.....	.....	.....	.....	.....	.....	.....	.....
Means	3.05	2.96	6.66	4.20	.....	.....	7.77	4.46	5.22	0.65	4.90	3.17	.....

RUSHVILLE, SCHUYLER COUNTY, ILLINOIS

Elevation, 670 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1889	1.70	1.86	0.81	.....	.....	.....	.....	.....	.....	.....	3.79	1.20	.....
1890	2.99	1.43	2.49	2.33	3.42	3.92	4.19	2.14	3.64	1.49	2.06	.25	30.35
1891	1.05	2.09	3.49	4.49	4.74	2.57	4.78	7.94	.61	2.34	4.93	2.13	41.16
1892	2.07	2.90	2.49	7.68	7.58	2.60	5.95	.60	3.18	1.27	3.56	2.09	41.77
1893	1.16	3.02	3.77	9.10	7.36	*3.03	2.45	1.91	2.96	.22	1.72	.81	37.51
1894	2.70	2.40	2.41	3.11	2.47	4.21	.67	2.06	8.32	1.12	2.92	1.70	34.09
1895	1.75	.37	1.03	2.88	3.32	3.88	5.53	4.85	3.44	.53	4.72	5.90	38.20
1896	1.56	1.72	.78	4.45	4.31	3.72	9.61	1.77	5.85	1.59	1.35	.67	37.38
1897	6.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1898†	.....	.....	.....	.....	.....	.....	.....	.....	6.68	2.22	2.47	.97	.....
1899	.89	1.99	2.75	1.14	8.38	2.58	4.25	3.00	4.26	3.43	1.96	2.02	36.65
1900	2.10	5.42	.96	†1.09	2.72	1.30	1.82	3.89	‡3.53	†3.76	1.48	.39	28.46
1901	2.50	1.21	3.37	1.89	.69	†3.86	2.65	.70	2.63	.71	1.07	1.75	23.03
1902	.67	1.47	4.67	2.76	2.72	8.34	4.38	6.45	4.32	2.86	2.00	2.67	43.31
1903	1.08	1.50	2.45	5.63	4.41	2.26	3.13	4.26	3.99	1.98	.97	.95	32.61
1904	3.07	.69	5.05	6.60	4.63	4.11	4.39	3.25	3.87	.22	.03	2.09	38.00
1905	.51	1.07	1.75	3.53	3.23	5.33	2.83	3.02	5.39	3.11	1.03	1.72	32.52
1906	1.75	1.90	3.49	3.30	1.73	3.84	2.52	3.83	4.82	.52	2.24	2.50	32.44
1907	5.86	.25	2.83	3.99	3.66	4.26	6.82	5.94	.89	.84	1.30	2.00	38.64
1908	1.30	3.60	.73	4.51	7.07	4.88	3.81	2.64	1.29	.40	3.05	.95	34.23
1909	2.02	2.70	1.02	5.16	5.56	3.51	3.99	.81	3.99	2.92	2.57	2.32	36.57
1910	1.61	.71	.12	2.82	6.11	.61	2.86	2.04	4.21	1.19	.59	1.16	24.03
1911	2.45	1.62	2.33	3.66	1.77	2.32	3.07	1.91	14.65	2.18	2.12	2.89	40.97
Means	2.22	1.90	2.32	4.01	4.29	3.56	3.98	3.15	4.40	1.74	2.18	1.77	35.10

† Values from September–December, 1898; all of year, 1899; from April–September, inclusive, 1900, and June–October, inclusive, 1901, are for Astoria, thirteen miles distant.

SANDWICH, DEKALB COUNTY, ILLINOIS

Elevation, 690 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1858	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6.08	.....
1859	*1.71	*0.86	5.18	4.07	4.37	*1.68	1.45	2.75	6.25	4.10	4.37	.50	37.29
1860	4.00	3.57	1.05	2.55	7.09	5.25	7.09	2.90	6.65	4.10	8.77	3.25	56.27
1861	1.05	3.38	5.80	5.45	1.056	6.42	8.29	5.02	11.38	7.54	1.85	1.96	68.70
1862	3.80	1.00	*6.43	6.26	9.49	5.68	15.64	8.99	6.80	2.70	2.25	1.35	70.39
1863	4.45	2.30	4.44	*3.26	8.78	1.26	4.28	7.56	3.06	4.02	.35	6.75	50.51
1864	3.80	3.00	5.31	5.14	2.72	2.37	8.78	1.08	1.30	1.94	1.68	2.25	38.37
1865	.35	3.50	3.22	1.55	.97	5.31	3.84	7.68	5.72	1.48	.37	.45	34.34
1866	2.10	1.80	2.77	1.65	3.19	5.29	3.90	5.18	2.97	3.23	.28	3.76	36.13
1867	2.20	5.85	4.30	2.45	7.58	6.93	1.95	2.98	1.80	.44	1.59	*1.66	39.73
1868	.85	.85	4.86	2.45	2.90	1.47	3.63	2.29	2.10	.95	3.00	.60	25.95
1869	1.41	3.20	.93	5.53	6.48	7.57	3.25	7.57	1.33	.70	3.18	3.17	44.32
1870	4.45	1.11	3.70	2.20	.....	.....	.....	.....	.....	.....	.....	.....	.....
1871	.....	.....	.....	.....	.....	.....	.....	.....	.40	5.04	3.70	3.45	.....

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

SANDWICH, DEKALB COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1872	.35	.43	4.28	5.20	7.11	1.59	3.62	9.00	4.85	.....	1.65	1.50	39.58
1873	5.30	.70	1.19	9.38	4.24	2.22	8.33	7.51	4.87	1.72	1.14	8.05	54.65
1874	3.35	3.75	3.38	5.07	5.38	8.15	.52	5.25	.....	.....	.....	.....	.....
1875	1.65	2.20	3.07	5.20	3.94	2.08	8.68	5.40	3.65	.....	1.07	4.30	.....
1876	5.92	6.63	8.77	5.26	8.17	.....	1.16	1.68	1.78	.19	3.20	1.32	.....
1877	1.53	.....	3.86	1.78	1.31	4.24	2.23	.80	.26	3.32	2.69	1.28	.....
1878	.70	1.17	1.18	.....	1.86	.....	2.70	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1884	1.45	3.48	2.08	.....	2.10	3.24	7.06	1.93	2.52	4.95	1.46	5.33	.....
1885	2.85	3.05	.62	2.46	1.30	2.94	2.53	6.99	3.58	2.14	1.89	3.17	35.52
1886	4.17	.77	2.45	1.35	3.06	1.28	2.03	3.01	5.13	1.65	1.47	1.30	27.67
1887	4.56	5.41	1.24	.57	1.88	1.77	4.74	3.79	3.62	2.95	2.35	5.35	38.23
1888	1.45	2.59	3.20	1.70	5.14	2.76	4.68	3.83	1.26	2.95	3.33	2.36	35.25
1889	2.27	2.88	.87	3.15	3.08	5.40	3.67	.79	3.12	1.47	2.63	1.82	31.15
1890	2.69	1.62	.....	.....	.....	7.54	.61	3.32	2.15	4.16	1.75	.33	.....
1891	2.52	4.13	3.80	4.70	1.57	3.34	3.18	3.87	1.62	.39	4.75	2.31	36.18
Means	2.62	2.66	3.38	3.68	3.43	3.99	4.53	4.45	3.52	2.59	2.43	2.83	42.12

* Interpolated from surrounding stations.

SAVANNA, CARROLL COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1899	0.24	1.20	1.09	1.71	7.96	4.76	4.14	2.09	1.11	2.59	1.30	1.80	29.95

SCALES MOUND, JODAVIESS COUNTY, ILLINOIS

Elevation, 900 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1895	.....	.....	.....	.....	.....	.....	.....	2.48	1.10	0.73	1.62	2.82	.....
1896	0.77	0.85	1.39	6.17	7.97	2.04	7.93	2.00	5.11	3.31	1.07	1.12	39.73
1897	1.96	.95	2.67	3.57	1.52	6.41	2.70	1.53	3.07	.50	1.15	1.66	27.69
1898	2.17	1.76	2.84	2.78	4.07	3.19	3.75	7.72	2.62	3.33	1.37	.41	36.01
1899	.48	1.18	1.49	4.64	7.27	3.20	7.38	2.53	1.14	1.08	1.51	1.57	33.47
1900	1.14	2.05	2.09	1.67	3.80	1.80	6.97	.....	.....	.....	1.34	.35	.....
1901	.86	.....	.....	.....	.....	2.17	2.34	.59	3.00	1.72	.81	1.60	.....
1902	.66	1.71	.....	1.85	8.01	7.63	.....	.....	.....	.....	.....	.....	.....
Means	1.15	1.42	2.10	3.45	5.44	3.78	4.85	2.81	2.67	1.78	1.27	1.36	34.22

SHAWNEETOWN, GALLATIN COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1886	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.10	5.87	1.73	.....
1887	1.57	5.76	2.45	.....	2.87	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1892	1.11	1.67	2.45	5.10	3.80	1.82	2.30	2.96	2.30	2.02	4.22	1.36	31.11
1893	1.63	4.60	2.08	10.55	3.77	3.12	2.17	.34	.....	.....	.....	.....	.....
Means	1.44	4.01	2.33	7.82	3.48	2.47	2.24	1.65	.....	1.06	5.04	1.54	.....

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

SOMONAUK, DEKALB COUNTY, ILLINOIS

Elevation, 680 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1875	.....	3.32	2.70	2.27	3.42	2.73	6.08	3.55	3.39	3.16	0.93	2.94	.....
1876	3.50	3.87	5.37	.....	.....	.....	.....	.....	.....	1.21	.....	.....	.....
Means	.....	3.60	4.04	.....	.....	.....	.....	.....	.....	2.18	.....	.....	.....

SPRINGFIELD, SANGAMON COUNTY, ILLINOIS

Elevation, 609 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1879	.....	.....	.....	.....	.....	.....	1.52	3.82	0.84	1.25	5.12	2.88	.....
1880	2.70	2.89	2.37	3.23	5.76	2.47	1.82	1.80	3.15	2.04	1.60	1.10	30.93
1881	.84	5.85	4.45	1.96	2.86	4.96	3.37	4.03	6.43	10.02	6.93	4.81	56.51
1882	2.48	7.92	4.92	3.85	10.59	12.71	1.89	3.13	1.21	3.76	2.60	3.15	58.21
1883	1.96	7.53	1.36	4.42	6.61	8.40	3.77	.95	1.06	6.08	3.48	3.17	48.79
1884	1.51	4.24	3.70	2.49	3.79	6.20	3.62	1.54	6.86	2.74	1.30	5.19	43.18
1885	2.81	.94	.17	6.36	2.78	4.18	1.82	4.82	4.47	6.30	1.44	2.52	38.61
1886	2.19	1.86	2.45	2.98	3.56	3.83	.05	4.19	7.24	.80	1.74	.80	31.69
1887	1.09	4.26	1.41	2.89	1.92	3.07	1.01	1.05	2.89	.85	1.36	3.35	25.15
1888	3.03	2.03	3.48	1.41	8.61	5.50	4.59	1.43	1.70	3.61	3.41	1.99	40.79
1889	2.13	1.64	1.97	.71	6.64	3.65	2.14	.78	4.74	2.86	4.05	2.00	33.31
1890	5.72	2.01	2.20	2.94	4.33	4.50	2.14	1.03	.96	1.30	1.29	.26	28.68
1891	1.16	2.59	3.21	2.81	1.96	2.11	4.44	4.65	1.38	1.88	5.49	1.59	33.27
1892	1.14	3.41	2.69	7.19	7.51	2.51	5.63	1.89	3.48	1.05	4.19	1.78	42.47
1893	.65	3.47	4.19	10.23	7.41	1.99	1.60	.28	2.15	.16	1.57	1.03	34.73
1894	2.51	2.58	3.09	3.36	2.80	1.56	2.06	1.86	2.94	.85	1.63	3.10	28.34
1895	1.12	1.03	1.61	2.49	2.55	3.49	5.53	2.76	2.80	.27	3.28	8.08	35.01
1896	1.77	2.11	1.25	1.91	2.49	6.45	8.51	1.87	5.42	1.76	1.88	.31	35.73
1897	5.91	1.15	4.47	3.85	2.19	4.11	4.16	2.86	.35	.52	4.94	3.07	37.58
1898	5.81	2.70	9.65	3.76	5.12	4.76	2.34	4.40	6.82	6.15	2.94	1.83	56.28
1899	1.51	2.52	2.95	1.12	11.81	2.45	1.51	3.81	3.33	4.08	1.84	1.87	38.80
1900	.88	4.85	1.50	1.06	2.49	1.45	2.89	4.44	5.15	2.63	2.61	.41	30.36
1901	1.80	1.31	2.96	1.23	1.88	5.34	.58	2.92	1.95	1.78	1.06	2.70	25.51
1902	1.01	1.01	3.73	3.03	1.80	10.10	1.41	5.12	2.30	2.15	2.82	2.23	36.71
1903	1.44	3.05	1.47	3.99	5.28	2.13	1.59	2.92	2.48	1.50	.98	1.50	28.33
1904	1.98	1.49	4.73	4.81	3.74	2.34	4.25	2.63	3.96	.11	.02	.57	30.63
1905	2.13	1.18	1.48	2.02	2.28	2.31	3.99	4.70	2.40	3.66	1.60	1.72	29.47
1906	2.99	2.18	4.02	2.26	3.70	3.03	.93	4.88	3.77	1.46	3.13	3.14	35.49
1907	6.17	.30	4.81	2.80	2.94	3.29	6.70	7.13	.92	1.36	1.87	2.79	41.08
1908	1.77	4.28	2.21	4.48	7.27	1.38	1.37	2.62	1.22	.29	1.17	1.62	29.68
1909	2.03	4.34	1.10	5.34	5.91	4.11	6.47	1.62	3.67	2.76	3.70	1.47	42.52
1910	1.68	.94	.18	2.81	4.39	5.58	2.63	.78	5.34	1.74	1.57	.86	27.50
1911	2.34	1.73	1.86	4.40	1.18	3.44	4.87	3.37	10.68	2.00	3.10	1.86	40.83
Means	2.32	2.79	2.86	3.38	4.50	4.14	3.07	2.91	3.46	2.42	2.60	2.36	36.76

ST. CHARLES, KANE COUNTY, ILLINOIS

Elevation, 700 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1854	.....	.....	0.37	0.13	2.60	2.05	3.10	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1857	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.00	.....
1858	2.02	1.86	2.91	5.36	6.07	5.78	10.49	2.35	5.38	3.73	4.36	2.41	52.72
1859	1.90	1.14	6.61	3.19	4.00	2.85	1.19	1.93	2.84	1.78	2.23	1.37	31.03
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1861	1.39	3.37	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1895	.....	.....	.....	.....	2.44	1.80	2.55	4.35	2.02	.....	.....	6.02	.....

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

ST. CHARLES, KANE COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1896	1.05	2.20	2.46	4.11	5.77	2.52	6.07	2.61	14.44	.40	3.00	.61	45.24
1897	6.04	1.99	4.37	3.47	1.41	2.69	3.41	1.67	.60	.28	3.36	1.48	30.77
1898	3.73	2.89	5.29	1.03	4.07	4.55	1.74	5.73	3.87	5.74	1.98	1.97	42.59
1899	.85	2.12	2.68	.58	5.62	.92	6.00	2.10	3.10	2.20	1.31	1.93	29.41
1900	2.12	4.67	*2.23	*.78	3.27	4.58	3.72	*3.28	2.15	2.36	3.27	.64	33.07
1901	1.53	.88	2.76	*.39	1.51	2.32	4.72	1.01	2.38	1.37	1.54	1.19	21.60
1902	.83	2.03	*3.14	2.11	7.90	7.36	6.85	2.67	6.65	2.19	2.98	1.84	46.55
1903	.54	2.55	5.17	4.04	3.71	3.08	6.89	4.83	6.60	1.39	1.06	1.94	41.80
1904	2.30	2.07	5.42	2.92	2.07	1.76	5.82	7.02	4.42	1.86	.01	2.25	37.92
1905	.99	2.78	2.73	3.59	7.80	3.46	2.70	4.25	3.23	2.66	2.42	1.74	38.35
1906	2.27	2.92	3.21	1.67	2.59	2.59	.74	3.55	7.47	2.47	3.11	2.20	34.78
1907	4.17	.70	2.94	2.16	4.15	4.90	5.45	4.12	6.49	1.53	*1.62	1.95	40.18
1908	.77	4.00	4.01	3.19	6.47	1.73	4.45	5.89	.88	1.36	2.52	.96	36.23
1909	1.38	2.74	1.32	7.14	2.46	5.50	.33	6.58	3.59	.99	5.27	4.44	41.74
1910	2.25	.90	.35	3.81	6.43	.74	1.77	2.99	2.88	1.19	1.41	1.01	25.73
1911	1.28	2.72	1.40	3.99	2.02	2.78	1.66	7.18	6.91	2.81	3.82	2.10	38.67
Means	1.97	2.34	3.13	2.83	4.12	3.20	3.98	3.90	4.52	2.02	2.52	1.95	37.13

* Estimated from Aurora and other stations.
Values from 1854–1861 are for Batovia, four miles distant.

ST. JOHN, PERRY COUNTY, ILLINOIS

Elevation, 459 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
†1887	.....	.....	4.11	.....	2.29	.....	2.40	0.21	2.47	.....	.....	.....	.....
1888	3.20	2.20	3.50	2.00	5.70	8.10	2.20	6.00	.70	2.60	4.60	2.50	40.80
†1889	2.85	2.25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
†1890	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1891	.46	4.25	2.22	4.16	1.10	2.09	1.54	4.19	.69	1.00	4.78	1.25	27.73
1892	1.50	2.56	2.16	5.98	7.76	2.14	2.08	*1.73	.56	2.74	3.53	1.35	34.09
1893	.40	2.93	3.69	9.81	3.74	4.66	1.16	1.58	2.79	2.58	3.20	1.28	37.32
1894	1.86	3.56	3.91	2.62	3.62	3.40	1.37	1.69	2.66	2.91	1.59	2.74	31.93
1895	2.07	1.05	2.94	2.12	2.50	2.84	5.07	2.04	2.59	.83	*4.94	*3.56	32.55
1896	1.58	2.43	3.89	3.19	9.46	4.40	6.83	2.14	2.70	1.94	3.86	1.31	43.73
1897	3.17	2.46	11.55	4.55	2.45	4.52	1.91	.66	1.50	1.46	4.70	4.16	43.09
1898	4.07	1.32	9.98	3.53	6.06	3.15	7.52	2.86	3.60	3.06	1.17	2.87	49.19
1899	3.65	3.73	3.34	2.67	3.03	4.73	3.60	2.53	.84	4.08	2.76	2.08	37.04
1900	1.98	4.19	1.85	2.59	4.85	*7.23	4.89	2.47	3.20	1.12	3.27	2.59	40.23
1901	1.38	1.83	4.59	2.48	1.68	*1.60	*.07	2.46	.45	2.71	1.03	3.24	23.52
1902	1.51	1.16	4.20	2.09	3.07	3.03	3.49	2.12	2.44	1.02	4.10	4.54	32.77
1903	1.49	3.64	3.22	2.25	1.89	1.37	2.04	2.39	1.33	2.29	1.12	2.05	25.08
1904	2.63	2.84	8.26	3.43	13.16	4.39	6.66	4.16	4.69	.83	.65	2.96	44.66
1905	2.51	1.94	2.77	4.25	3.07	3.56	13.49	1.86	3.89	3.60	1.85	2.81	45.60
1906	4.30	3.65	4.38	1.33	.94	2.75	3.37	2.64	8.28	.85	6.40	5.66	44.55
1907	6.47	.82	2.64	2.50	5.08	8.18	3.18	7.48	1.65	1.96	3.66	3.53	47.15
1908	2.28	5.55	3.67	7.31	6.21	1.41	4.72	2.16	.96	T	†1.88	†1.16	37.31
†1909	5.80	4.63	4.90	5.43	3.86	1.34	8.72	.17	5.71	.84	3.13	3.71	48.24
†1910	1.43	4.16	.08	3.23	2.99	3.41	3.68	2.59	2.41	7.17	.31	2.01	33.47
†1911	.89	4.02	1.38	8.52	1.86	1.87	1.91	3.55	10.26	3.02	2.68	2.30	42.26
Means	2.47	2.92	4.05	3.91	3.71	3.68	4.00	2.60	2.68	2.03	2.96	2.71	38.31

* For Hallidayboro, ten miles distant.
† For DuQuoin, two miles distant.

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

ST. LOUIS, ST. LOUIS COUNTY, MISSOURI

Elevation, 568 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1830	.....	.....	.....	.....	.....	.....	4.97	12.25	5.16	5.79	1.28	0.55	.....
1831	2.08	1.06	4.58	4.39	1.95	1.34	1.88	2.51	1.99	6.76	4.08	3.68	36.30
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1836	.....	.....	.....	.....	.....	.....	3.66	6.51	5.90	2.59	4.20	5.02	.....
1837	.84	1.35	3.13	2.34	3.00	3.46	2.48	2.73	2.85	.79	1.96	2.01	26.94
1838	3.72	1.11	1.51	3.36	1.68	3.73	3.13	4.47	.06	3.06	2.09	.44	28.36
1839	2.21	2.50	2.59	5.46	7.93	7.26	5.71	2.89	2.45	3.96	2.48	2.00	47.44
1840	1.80	1.38	2.10	3.31	4.58	6.27	2.36	7.15	3.96	6.30	1.73	.71	41.65
1841	.84	.88	4.99	3.85	2.38	1.67	3.09	5.63	3.22	6.81	5.44	3.93	42.73
1842	.45	3.90	2.21	3.48	3.22	5.12	1.76	2.64	2.17	2.57	2.38	2.39	32.29
1843	2.34	1.90	3.49	4.87	4.15	3.95	2.49	1.32	2.19	1.55	4.82	1.72	34.79
1844	3.36	1.73	4.84	3.86	11.26	6.85	8.13	.45	.30	2.25	1.17	1.61	45.81
1845	1.83	1.07	3.18	2.28	4.42	10.01	4.75	6.23	1.03	1.16	1.10	.93	37.99
1846	2.98	1.27	1.27	4.84	3.75	5.21	.84	4.73	4.84	2.71	2.11	10.90	45.45
1847	2.12	3.58	2.28	3.98	4.36	8.61	5.37	.90	3.26	8.74	8.63	.89	52.72
1848	1.86	2.27	6.61	3.16	8.10	17.07	5.37	9.74	1.12	2.41	1.91	5.74	65.36
1849	4.18	.56	2.70	2.64	2.71	6.46	9.40	5.15	5.81	2.17	2.11	1.82	45.71
1850	1.94	4.10	5.63	7.68	7.47	1.47	4.83	2.10	3.74	2.71	6.24	2.59	50.50
1851	.61	6.74	3.14	4.70	2.83	6.19	1.77	8.97	.49	1.51	1.99	3.90	42.84
1852	.99	2.12	7.67	2.28	5.19	10.25	3.36	1.60	1.47	5.26	3.29	3.48	46.96
1853	.52	1.67	.79	3.24	3.64	3.23	4.10	5.48	4.67	.96	1.51	1.08	30.89
1854	1.18	3.11	7.49	7.60	6.30	3.21	.92	1.80	1.44	4.15	1.94	1.49	40.62
1855	4.66	.70	2.89	2.65	7.46	4.27	5.17	6.53	3.89	3.89	5.16	3.10	50.37
1856	1.03	3.64	1.06	6.35	3.03	1.24	4.61	6.32	3.51	2.10	4.90	4.29	42.08
1857	.41	7.74	1.80	1.72	4.81	3.71	2.82	4.15	3.18	3.02	3.80	1.87	39.08
1858	3.42	2.12	3.96	6.07	10.64	6.69	8.03	2.87	3.86	7.73	4.92	8.52	68.83
1859	2.32	5.35	7.32	4.89	6.60	11.02	5.54	2.93	4.44	1.80	5.43	3.76	61.40
1860	1.80	2.60	1.16	2.03	2.29	6.58	2.97	2.96	2.11	1.58	1.63	2.08	29.79
1861	1.16	2.01	7.38	3.18	4.39	4.96	2.04	3.44	4.14	2.85	1.39	1.09	38.03
1862	4.01	.80	4.11	4.82	2.51	2.85	3.61	1.32	6.27	3.73	3.59	6.38	44.00
1863	4.11	3.99	3.02	1.55	2.68	3.16	2.51	6.93	1.56	4.76	2.15	4.03	40.45
1864	2.74	.82	1.71	5.58	3.90	.41	3.60	4.91	2.82	3.15	5.25	2.72	37.61
1865	.87	3.75	8.61	3.31	5.66	5.21	7.94	1.97	2.60	3.33	.00	3.63	46.88
1866	4.16	2.24	2.80	1.56	2.24	5.59	3.68	3.71	10.53	2.01	1.37	1.87	41.75
1867	2.28	4.81	2.37	.53	8.26	5.64	3.71	2.29	.17	1.31	2.74	3.65	37.76
1868	1.71	.55	7.66	7.08	3.96	1.58	2.03	8.53	5.25	2.11	2.04	3.09	45.59
1869	2.02	2.49	4.24	4.61	3.60	6.25	2.49	5.51	1.70	3.42	7.48	3.16	46.97
1870	2.25	.33	2.76	2.39	2.73	1.38	1.59	6.55	1.14	3.35	1.94	2.76	29.17
1871	2.53	2.92	1.27	.49	3.15	2.51	1.64	3.55	.25	2.07	1.83	1.17	23.28
1872	.64	1.15	2.43	2.77	6.04	4.28	4.59	.93	3.38	.55	2.01	1.70	30.47
1873	3.53	1.52	2.10	6.88	5.73	6.68	5.96	.07	3.02	3.27	1.64	5.10	45.50
1874	3.14	3.66	4.36	3.44	3.70	2.00	5.71	4.70	2.30	1.09	2.32	1.46	37.88
1875	.54	2.59	4.08	2.53	5.48	10.84	9.50	2.66	.24	1.23	.89	2.42	43.00
1876	4.75	2.86	6.90	2.25	3.13	3.43	5.90	5.03	7.63	1.66	1.74	.18	48.46
1877	1.24	.88	3.41	3.03	3.11	8.69	2.88	2.61	3.56	4.92	3.76	3.34	41.43
1878	3.36	1.69	2.79	6.74	4.63	2.40	3.92	4.75	3.42	3.27	1.38	3.48	40.83
1879	1.64	1.48	1.92	2.31	.95	4.04	1.97	2.23	1.34	.68	4.30	2.84	25.70
1880	3.83	2.65	2.51	3.31	3.44	2.56	5.17	1.53	3.10	2.09	2.67	1.80	34.66
1881	.49	4.16	1.95	3.14	3.96	2.74	2.13	.31	3.14	7.21	6.74	1.40	37.37
1882	2.80	8.94	3.49	3.58	4.55	4.53	3.84	2.20	1.73	2.44	3.24	1.81	43.15
1883	.94	5.88	2.29	3.31	2.89	5.04	4.31	3.34	.01	6.60	3.71	1.78	40.10
1884	.79	4.43	3.00	4.15	2.68	4.52	2.86	1.21	6.04	2.48	2.30	6.18	40.64
1885	3.26	.87	.40	4.84	2.80	7.68	2.58	2.96	8.98	7.51	1.68	2.03	45.59
1886	3.11	1.71	3.04	2.10	7.84	7.09	.55	2.44	9.60	.85	3.36	2.65	44.34
1887	.65	3.68	3.54	4.36	5.27	2.54	2.74	1.14	2.47	.76	4.61	3.54	35.30
1888	2.15	2.39	3.79	1.88	3.81	8.09	2.09	6.66	1.31	2.59	4.40	2.01	41.17
1889	3.04	4.78	1.62	1.68	3.80	4.72	2.02	.85	3.54	1.65	4.43	1.03	33.16
1890	7.47	2.86	5.99	4.05	5.81	3.18	.37	2.43	1.80	.86	1.55	1.32	37.69
1891	1.35	2.95	2.29	2.29	2.73	5.97	1.50	2.75	1.43	.65	5.30	1.32	30.53
1892	1.52	4.89	1.92	7.60	7.87	2.73	4.64	1.75	1.59	1.66	3.46	1.99	41.62
1893	.33	2.98	5.10	10.84	5.42	3.49	2.49	.65	3.69	1.66	1.36	1.32	39.33
1894	2.56	2.88	2.69	2.68	3.61	1.12	1.35	1.66	3.11	1.56	1.49	2.73	27.44
1895	1.65	.43	2.82	.46	3.16	2.46	7.26	2.08	2.01	.23	3.98	4.66	31.20
1896	1.43	2.81	2.03	2.43	9.12	4.57	4.67	2.12	2.42	1.20	3.70	1.05	37.55
1897	3.75	2.67	8.25	4.66	1.59	5.32	3.23	.66	.09	.31	6.21	3.43	40.17
1898	4.53	1.71	7.73	3.85	8.55	3.85	7.44	.87	3.23	4.34	2.07	1.03	49.20
1899	1.66	3.40	3.96	1.98	6.32	2.32	4.54	2.77	1.27	2.89	1.95	1.55	34.61
1900	.65	5.09	1.45	1.83	4.47	2.62	3.85	1.30	2.68	2.07	3.10	.40	29.51
1901	1.12	1.86	2.94	2.35	2.69	3.92	1.47	.76	.64	2.12	1.21	3.72	24.80
1902	1.18	.83	4.50	2.49	3.04	7.86	2.34	5.20	1.98	2.00	3.20	3.81	38.43
1903	1.76	3.14	3.20	2.79	2.06	5.71	2.68	6.16	3.06	1.37	.61	1.25	33.81
1904	3.15	.84	7.87	3.25	2.88	4.64	3.09	2.62	2.97	.50	.54	1.36	33.71

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

ST. LOUIS, ST. LOUIS COUNTY, MISSOURI—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1905	2.47	1.12	2.35	2.32	4.67	2.72	4.42	2.58	5.56	6.64	1.63	2.06	38.54
1906	3.57	2.92	4.53	1.98	2.61	2.80	.98	3.72	4.40	1.25	4.67	2.09	35.52
1907	7.35	1.12	2.39	3.65	5.57	4.96	3.32	4.36	1.57	3.15	1.89	2.06	41.39
1908	2.06	3.39	3.43	3.84	7.72	3.02	4.24	1.55	1.24	.21	2.83	.64	34.19
1909	3.20	3.94	3.69	6.18	5.99	2.63	7.34	.66	4.22	3.40	4.36	1.89	47.50
1910	2.73	3.22	.14	4.09	5.23	4.24	4.21	1.90	6.09	3.98	.30	1.18	37.31
1911	.85	3.02	2.22	7.46	2.26	1.34	.64	3.51	7.09	2.63	3.44	1.67	36.13
Means	2.27	2.67	3.55	3.70	4.53	4.74	3.70	3.42	3.11	2.85	2.85	2.58	39.83

ST. PETER, FAYETTE COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1910	2.22	3.65	0.15	1.87	3.86	2.16	5.58	1.90	5.27	4.11	0.45	1.30	32.52
1911	1.57	1.95	2.31	5.40	.95	2.83	.72	1.93	9.50	4.40	3.00	2.53	36.99
Means	1.90	2.75	1.23	3.64	2.40	2.50	3.15	1.92	7.38	4.26	1.72	1.92	34.76

STAUNTON, MACOUPIN COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1908	.....	.....	.....	.....	.....	2.13	6.05	2.14	1.32	0.05	3.07	1.40	.....
1909	2.59	2.77	2.64	6.94	4.90	2.98	2.70	.39	4.81	3.41	5.49	.....	.....
Means	.....	.....	.....	.....	.....	2.56	4.38	1.26	3.06	1.73	4.28	.....	.....

STERLING, WHITESIDE COUNTY, ILLINOIS
Elevation, 550 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1878	.....	.....	.....	.....	.....	.....	.....	3.00	2.80	7.90	0.70	1.70	.....
1879	5.00	3.70	7.40	1.50	6.40	6.90	9.90	4.70	2.35	1.40	7.60	6.10	.....
1880	1.90	1.60	.....	.....	.....	.....	.....	.....	.....	2.50	4.25	6.25	.....
1881	2.80	8.00	3.50	4.50	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.35	.....
1887	2.71	.....	.35	.38	1.08	.....	.....	.....	2.30	1.90	1.39	3.78	.....
1888	1.25	1.13	3.40	2.40	5.96	.....	.....	.....	.....	.....	.....	.....	.....
1889	.....	.....	.....	3.51	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	2.73	3.61	3.66	2.46	4.48	.....	.....	3.85	2.48	3.42	3.48	4.04	.....

STRAWN, LIVINGSTON COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1899	.....	.....	.....	1.04	3.41	4.07	1.80	0.74	3.79	2.60	1.78	2.73	.....
1900	0.95	3.76	2.11	1.12	3.76	.....	.....	5.94	1.50	1.64	1.52	.71	.....
1901	1.46	1.18	3.59	1.07	2.77	4.22	2.37	3.00	2.52	3.22	1.00	*2.64	29.04
1902	.97	1.70	3.55	2.39	3.59	14.00	.....	.....	5.67	.....	.....	.....	.....
Means	1.13	2.21	3.08	1.40	3.38	7.43	2.08	3.23	3.37	2.49	1.43	2.03	.....

* Five days missing.

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

STREATOR, LASALLE COUNTY, ILLINOIS

Elevation, 616 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1893	.....	.....	.....	6.17	3.21	0.96	.....	.....	3.00	.....	2.80	0.97	.....
1894	1.90	0.44	2.95	1.03	3.62	2.53	.....	.....	.....	.....	.....	2.10	.....
1895	1.55	.30	1.40	.41	.80	.....	6.00	2.60	1.90	1.00	4.54	5.89	.....
1896	1.30	1.15	.65	2.63	5.98	3.27	5.75	1.52	3.44	.05	2.07	.10	27.91
1897	5.65	1.55	4.08	1.88	1.13	6.70	2.71	1.07	1.10	.23	4.20	1.32	31.62
1898	3.43	1.62	6.93	3.00	6.00	3.24	.62	2.96	4.20	2.99	2.47	.77	38.23
1899	1.28	1.82	*2.00	.45	2.50	1.82	5.22	1.69	2.73	2.47	1.23	1.93	25.14
1900	1.49	3.54	2.85	1.24	2.44	1.63	3.13	7.13	2.56	2.18	2.57	.34	31.10
1901	1.42	1.40	3.49	.75	1.24	2.85	3.02	2.56	2.20	.63	1.38	2.15	23.09
1902	.79	1.32	4.66	2.17	4.37	10.64	8.59	7.11	5.26	3.24	3.48	1.74	53.37
1903	.90	2.52	3.79	4.81	2.48	2.07	2.43	4.04	7.60	1.02	.78	1.78	34.22
1904	2.23	1.55	5.76	3.91	4.46	2.11	4.60	2.39	4.15	.20	T	1.57	32.93
1905	1.07	1.38	2.20	4.22	4.77	3.01	4.10	2.15	2.39	2.64	1.73	1.41	31.07
1906	2.26	1.99	2.77	1.40	1.79	3.10	1.39	2.25	4.25	1.64	2.75	3.06	28.65
1907	5.64	.10	3.02	2.92	3.70	3.95	7.61	5.08	5.58	.51	2.06	1.41	41.58
1908	.59	3.73	2.53	4.15	7.16	1.69	3.62	.41	.39	.68	2.36	.92	28.23
1909	1.37	3.45	1.81	6.61	2.76	4.79	2.60	3.31	2.74	2.21	3.73	2.85	38.23
1910	2.25	1.03	.41	4.20	5.13	2.98	.81	5.38	4.59	1.43	.43	1.81	30.65
1911	2.22	1.91	1.77	3.50	2.33	4.24	2.44	4.20	6.77	.....	2.86	2.17	.....
Means	2.07	1.71	2.95	2.92	3.47	3.41	3.80	3.29	3.60	1.44	2.30	1.81	33.07

* Estimated.

SULLIVAN, MOULTRIE COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1899	2.27	2.13	3.21	1.31	6.81	1.28	3.67	2.86	1.09	3.73	2.07	3.00	33.43
1900	.42	5.54	1.92	1.03	2.82	4.67	.....	3.17	2.75	3.12	3.44	1.65	.....
1901	1.72	2.15	3.61	2.19	5.02	6.29	1.43	3.25	1.04	2.84	1.78	3.11	34.43
1902	1.05	1.18	2.42	3.40	3.22	8.82	2.70	4.19	3.13	3.24	2.54	3.09	37.98
1903	1.16	2.53	2.07	3.67	1.38	4.99	4.91	3.58	1.40	2.98	1.97	2.20	32.84
1904	2.82	1.71	9.12	4.56	4.08	2.29	2.91	4.86	4.03	.58	.06	1.26	38.28
1905	2.28	1.37	1.45	2.23	4.49	2.36	6.37	1.70	1.23	5.22	2.44	2.12	33.26
1906	3.07	1.97	5.12	2.72	4.42	6.26	1.76	4.20	4.31	1.66	3.84	3.80	43.13
1907	5.64	.40	2.96	2.43	2.94	5.44	5.78	4.04	.61	1.90	2.41	2.15	36.70
1908	1.35	4.23	2.46	5.80	9.67	4.09	2.40	.81	2.12	.07	2.66	1.51	37.17
1909	2.47	5.21	1.75	10.74	4.89	5.14	5.58	1.30	4.37	3.39	3.34	2.36	50.54
1910	2.11	2.03	.34	3.18	6.75	2.01	4.90	4.05	7.94	2.09	3.48	1.39	40.27
1911	3.32	2.20	2.16	6.24	3.21	1.29	1.90	4.62	13.23	3.42	3.02	1.33	45.94
Means	2.28	2.51	2.97	3.81	4.59	4.22	3.69	3.28	3.63	2.63	2.54	2.23	38.66

SUMNER, LAWRENCE COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1886	4.90	2.30	4.00	4.65	2.75	6.10	3.30	3.15	2.37	.....	8.40	2.90	.....
1887	1.20	5.40	5.53	6.30	3.70	.80	3.00	2.70	2.30	.70	4.60	2.70	38.90
1888	1.00	1.60	4.80	1.40	2.70	2.90	2.70	5.40	1.40	2.20	5.35	1.40	.....
1889	3.20	1.60	1.40	1.10	3.20	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1909	3.17	6.41	4.37	3.50	3.56	7.38	3.56	.47	2.88	3.18	3.67	3.10	45.25
1910	1.60	3.20	.23	3.53	3.80	3.53	9.61	1.65	10.83	7.80	1.77	1.90	49.45
1911	1.90	2.31	1.74	6.45	1.52	6.26	.56	1.80	14.60	2.44	.39	2.10	44.07
Means	2.42	3.26	3.15	3.85	3.03	4.50	3.79	2.53	5.73	3.26	4.36	2.35	44.42

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

SWANWICK, PERRY COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1881	.....	.....	.....	3.34	2.55	4.42	1.00	0.06	3.16	6.40	.....	.....	.....
1882	2.21	7.17	3.96	1.29	6.68	3.22	4.00	3.42	3.27	3.73	.....	.....	.....
1883	1.41	6.66	3.27	4.64	3.16	6.38	5.24	3.22	.06	8.53	5.90	2.92	51.39
1884	1.15	6.18	2.75	2.12	4.84	5.66	1.90	1.04	2.85	1.00	1.56	.....	.....
1885	2.61	.66	.92	2.91	4.26	5.56	2.59	3.19	3.64	4.00	2.74	2.58	35.66
1886	2.63	1.31	2.66	4.09	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	2.00	4.40	2.71	3.06	4.30	5.05	2.95	2.18	2.60	4.73	3.40	2.75	43.52

SYCAMORE, DEKALB COUNTY, ILLINOIS

Elevation, 855 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1881	.....	.....	.....	.....	3.50	11.40	7.05	0.80	5.10	8.20	3.60	3.75	.....
1882	1.31	1.90	4.35	6.10	3.80	7.90	4.35	2.34	1.94	4.55	2.25	2.25	43.54
1883	2.15	4.95	.65	3.41	8.55	5.85	5.50	1.95	2.93	6.48	6.63	1.86	50.91
1884	.71	2.15	2.02	4.06	3.18	4.63	8.84	3.43	3.46	5.76	2.48	4.14	44.86
1885	2.66	1.55	.55	4.31	1.65	7.04	4.98	9.90	6.10	4.65	2.06	3.05	48.50
1886	4.10	1.85	3.85	5.14	4.24	2.27	.67	4.29	3.23	2.26	.96	1.54	34.40
1887	3.93	4.50	.89	1.08	.95	1.12	3.12	3.61	3.27	2.80	1.49	3.02	29.78
1888	1.01	1.16	2.59	2.05	5.50	1.27	3.10	4.03	1.09	2.37	1.80	2.16	28.13
1889	1.13	1.16	1.39	3.47	5.17	1.50	4.48	.86	1.93	.85	1.80	1.52	25.26
1890	1.64	1.15	1.57	2.58	3.87	7.98	.42	2.07	1.22	3.48	1.87	1.50	29.35
1891	1.91	1.60	1.95	4.50	2.79	3.55	2.00	2.22	.37	.89	4.21	2.37	28.36
1892	1.73	1.21	2.01	4.81	11.77	11.23	2.56	3.56	1.62	.95	2.13	2.06	45.64
1893	1.83	2.12	2.22	4.59	3.25	5.04	3.65	.46	3.83	1.13	2.74	2.19	33.05
1894	2.50	1.35	3.26	2.87	3.90	1.79	.78	.95	7.88	1.77	1.96	.74	29.75
1895	1.35	.30	1.03	1.24	2.52	2.20	3.10	3.06	.75	.55	3.71	3.38	23.19
1896	.50	2.03	1.44	2.74	3.80	1.59	3.60	.58	8.39	.26	1.88	.55	27.36
1897	4.64	1.31	4.31	3.78	1.10	6.04	3.03	1.06	.44	.38	3.38	.81	30.28
1898	3.28	3.57	5.42	1.65	3.20	3.47	1.22	6.47	3.71	4.81	1.76	.80	39.36
1899	.37	1.59	2.14	.96	3.32	1.19	4.04	1.39	1.73	2.44	1.33	1.41	21.91
1900	1.63	3.00	1.96	1.15	2.83	2.22	5.60	11.17	2.79	2.27	2.23	.53	37.38
1901	1.27	1.19	3.86	.44	1.63	1.88	4.51	1.06	2.18	.71	1.32	1.30	21.35
1902	.70	2.72	3.27	1.96	7.97	9.00	7.83	2.27	4.29	3.10	2.95	2.02	48.08
1903	1.83	1.87	3.10	4.76	3.16	2.70	7.14	5.14	6.88	2.57	.97	2.38	42.50
1904	1.31	1.52	4.66	2.91	3.51	2.57	4.04	6.49	5.24	.84	.03	2.16	35.28
1905	.50	1.45	2.98	3.14	6.59	4.30	3.20	6.52	1.06	4.61	2.20	1.66	38.21
1906	2.99	3.03	3.06	1.80	4.40	3.17	1.36	3.34	6.09	2.02	3.40	1.84	36.50
1907	3.88	.30	1.49	2.66	4.59	4.57	4.99	3.28	7.39	1.26	1.42	1.17	37.00
1908	.79	2.93	3.31	4.60	7.01	4.12	3.06	3.46	1.00	.86	2.05	1.50	34.69
1909	1.72	1.97	1.60	10.09	2.97	3.27	.62	7.08	3.95	1.19	5.42	5.27	45.15
1910	1.25	.77	.23	3.78	4.81	.78	1.50	4.22	1.80	2.04	1.10	.63	22.91
1911	1.47	1.94	.74	3.21	2.56	2.56	2.65	4.88	6.16	2.91	3.74	1.78	34.60
Means	1.87	1.94	2.42	3.33	4.14	4.13	3.64	3.61	3.48	2.54	2.42	1.98	34.91

TILDEN, RANDOLPH COUNTY, ILLINOIS

Elevation, 500 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1887	1.65	.....	4.62	2.66	4.49	2.27	1.93	0.88	2.97	2.28	7.09	3.41	.....
1888	2.17	3.27	5.18	1.82	2.79	7.23	1.30	10.22	2.26	3.55	4.48	2.49	46.76
1889	3.55	2.35	1.68	*1.60	3.68	8.11	3.41	3.59	2.27	1.51	5.15	1.66	38.56
1890	8.12	3.93	7.33	6.54	2.92	1.38	1.73	7.06	4.34	.62	2.38	1.59	47.94
1891	1.88	5.22	2.00	2.74	2.87	4.27	.65	3.43	.66	1.93	6.23	1.83	33.71
1892	1.67	4.09	1.52	11.03	5.91	3.22	2.95	2.22	2.59	2.44	5.95	2.19	45.78
1893	.28	1.77	2.74	9.23	4.09	4.14	2.64	2.39	3.07	6.55	1.68	1.23	39.81
1894	2.30	2.60	2.81	3.93	3.57	1.17	3.15	1.32	3.91	1.22	.77	2.84	29.59
1895	1.50	.45	2.53	1.03	3.08	3.84	3.75	2.56	2.65	.41	4.30	5.45	31.55

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

TILDEN, RANDOLPH COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1896	1.33	2.36	3.69	3.64	8.56	2.84	6.06	1.47	3.15	1.56	3.43	.22	38.31
1897	3.16	2.37	10.51	3.55	1.57	4.88	.93	.49	.27	1.13	4.54	4.13	37.53
1898	3.83	1.94	9.95	3.40	5.93	5.09	6.91	4.85	4.81	6.36	1.88	1.97	56.92
1899	2.16	2.91	2.27	1.30	3.04	2.72	5.79	1.64	.93	2.75	1.33	1.89	28.78
1900	.63	3.05	1.25	2.37	2.79	6.66	3.42	1.50	3.22	2.20	3.38	1.19	31.72
1901	.99	1.96	3.03	2.11	2.32	1.37	1.33	1.05	2.37	2.28	2.40	3.59	24.80
1902	.96	.76	4.47	2.04	4.70	2.82	2.71	4.15	3.79	1.42	4.09	4.33	36.24
1903	.95	2.89	3.06	3.13	2.69	2.51	1.35	3.58	1.63	4.32	2.05	1.69	29.85
1904	2.39	1.83	8.66	4.62	3.14	5.18	2.23	5.33	6.47	.57	.86	1.66	42.94
1905	2.61	1.52	3.79	4.63	3.09	.26	11.34	3.20	5.19	3.91	2.02	2.92	44.48
1906	4.51	2.64	4.36	1.77	2.80	2.98	1.72	4.42	7.42	1.52	5.70	3.23	43.07
1907	6.13	1.16	2.66	3.73	5.40	4.41	2.60	5.11	3.99	3.01	3.17	4.05	45.42
1908	2.03	5.61	3.94	7.02	7.08	2.30	5.26	2.74	1.32	.10	4.34	.72	42.46
1909	2.95	4.27	3.96	7.53	3.97	3.76	6.14	.07	5.47	1.97	5.56	2.86	48.51
1910	2.45	3.27	.03	3.23	5.46	2.90	5.16	4.06	4.47	4.62	1.19	1.58	38.42
1911	1.17	2.52	2.08	7.98	1.46	.91	1.67	3.92	6.74	3.71	2.71	2.72	37.59
Means	2.45	2.69	3.92	4.10	3.89	3.48	3.45	3.25	3.44	2.48	3.47	2.46	39.19

* Interpolated from surrounding stations.
Values from 1887 to February 1898, inclusive, are for Jordans Grove.
Values for 1910–11 are for Sparta, five miles distant.

TISKILWA, BUREAU COUNTY, ILLINOIS

Elevation, 798 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1864	.....	.....	.....	.....	.....	.....	.....	1.75	3.16	3.16	2.98	3.89	.....
1865	0.26	3.40	3.12	6.14	1.57	4.47	6.96	8.79	11.57	2.90	.28	.54	50.00
1866	1.92	2.02	2.38	1.90	1.90	2.80	4.19	5.44	6.79	1.66	.26	3.06	34.32
1867	1.76	1.27	2.06	2.00	6.62	3.30	1.95	2.48	1.36	.97	2.40	1.50	27.67
1868	.48	.97	5.15	.....	.....	2.41	2.03	2.08	4.61	1.24	3.57	1.21	.....
1869	1.95	2.47	1.14	3.40	7.78	9.96	6.86	9.37	.67	.81	3.88	3.02	51.31
1870	4.15	.70	5.50	.60	1.42	.70	1.91	.....	6.64	3.62	1.84	1.52	.....
1871	3.32	2.00	2.72	2.83	2.35	5.90	1.85	.....	.....	.....	3.45	3.47	.....
1872	.18	.75	2.96	5.91	6.56	6.31	4.05	9.21	6.33	.92	1.59	1.28	46.05
1873	4.55	1.06	1.39	6.75	7.25	2.65	5.65	1.32	1.83	2.23	1.40	3.87	39.95
1874	2.84	1.54	1.81	3.87	3.48	4.56	1.78	3.56	5.14	3.40	2.94	.74	35.66
1875	1.10	2.34	2.38	3.40	4.65	6.18	9.60	2.30	8.53	4.15	.83	2.60	48.06
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1895	.....	.....	.....	.....	2.70	.70	7.89	2.38	4.44	.78	3.31	3.89	.....
1896	1.16	1.59	1.01	4.28	4.71	2.81	5.57	2.50	6.70	.76	1.78	.17	33.04
1897	5.81	1.27	4.55	2.77	1.42	4.34	2.38	1.48	2.62	.36	3.36	1.24	30.60
1898	3.76	2.43	6.17	3.50	7.30	2.85	1.17	6.97	4.58	2.63	2.93	1.09	45.38
1899	.38	1.81	2.83	1.03	5.25	3.89	3.48	1.65	2.55	3.73	1.15	1.63	29.38
1900	1.88	3.85	3.52	1.72	4.23	1.52	2.40	7.76	4.67	2.89	2.03	.22	36.69
1901	1.36	1.83	3.53	.80	2.63	2.15	5.12	2.02	2.10	.70	1.54	1.41	25.19
1902	.55	1.46	3.29	2.33	5.05	8.19	10.70	5.00	6.25	2.99	3.75	2.12	51.68
1903	.99	2.95	2.71	5.07	3.72	2.82	2.24	4.26	7.19	2.43	1.27	1.20	36.85
1904	2.53	1.17	3.78	3.32	3.39	1.99	6.78	5.37	3.40	.28	.10	1.90	33.91
1905	.84	1.35	2.73	4.59	5.10	5.72	1.82	2.54	2.51	2.14	2.03	1.60	32.97
1906	2.39	2.28	3.71	2.42	2.96	3.70	2.14	4.38	6.25	1.60	2.97	2.10	36.90
1907	4.47	.33	2.21	2.83	5.65	3.34	10.17	5.39	3.69	.66	1.59	1.36	41.69
1908	1.22	3.65	3.62	3.01	9.98	3.80	1.89	1.71	1.14	.90	2.62	.83	34.37
1909	1.52	3.19	1.81	4.75	3.82	3.32	3.02	4.50	3.99	2.56	3.67	4.66	40.81
1910	2.57	1.17	.31	2.66	7.10	1.52	.91	1.67	2.51	.....	.....	.....	.....
1911	.....	.....	1.04	3.44	1.55	2.22	3.27	4.78	6.27	1.71	2.05	2.10	.....
Means	2.08	1.88	2.86	3.28	4.45	3.68	4.21	4.10	4.56	1.94	2.20	1.94	38.29

Values from 1864–75, inclusive, for Wyanet, six miles from Tiskilwa.

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

TOULON, STARK COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1886												0.71	
1887	0.91	2.73	1.25	0.46	1.00	2.61	1.01	2.25	2.51	2.14	0.85	3.20	20.92
Means												1.96	

TUSCOLA, DOUGLAS COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1909	3.10	4.51	1.25	7.94	3.88	3.70	4.42	2.29	3.10	3.28	2.89	2.74	43.10
1910	2.68	2.48	.40	3.11	5.88	1.76	6.59	1.42	4.75	3.28	1.61	1.51	35.47
1911	2.38	1.81	2.07	4.80	.69	3.49	2.14	3.19	9.27	3.27	3.00	1.59	37 70
Means	2.72	2.93	1.24	5.28	3.48	2.98	4.38	2.30	5.71	3.28	2.50	1.95	38.76

UPPER ALTON, MADISON COUNTY, ILLINOIS
Elevation, 650 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1854	1.40	0.17	2.26	1.13	3.20	0.21	0.01	0.86	2.12		0.07	1.02	
1855	4.83	.06	2.50	.92	3.95	3.08	3.01	1.94	2.82	3.20	3.03	3.05	32.39
1856	.60	2.16		3.48	2.32	.60	2.08	3.75			3.46	2.06	
1857				1.35	1.55	1.87							
1858						5.00	7.27	1.90	2.35	3.42	2.81	2.66	
1859	1.09	2.70	3.09	3.95	5.00	4.44	2.14	2.31	2.96				
1861		.27	4.70										
1863								1.50	.78	.20			
1878							1.29	1.03	3.07	1.73	1.75	5.43	
1879	1.97	1.24	2.63	2.57	1.09	4.78	3.69	3.06	1.93	1.80	4.35	3.82	32.93
1880	1.93	2.83	2.65	3.08	3.15	2.48	4.40	1.42	1.47	2.00	3.06	2.94	31.41
1881	.39	5.44	1.68	3.02	4.50	5.54	1.79	.03	5.60	6.97	8.05	1.41	44.42
1882	2.12	8.26	2.03	3.14	5.45	4.46	2.66	2.40	1.58		2.89	2.02	
Means	1.79	2.57	2.69	2.52	3.36	3.25	2.83	1.84	2.47	1.93	3.27	2.71	35.29

URBANA, CHAMPAIGN COUNTY, ILLINOIS
Elevation, 230 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1857	0.63				2.88	3.33	1.68	2.25	2.98	0.84	3.61	2.19	
1858	1.24	0.54	1.95	5.71	8.40	8.03	3.79		3.11	3.58	4.32	2.13	
1859	1.18	2.98	2.07	4.79	2.82	2.29	1.70	4.93	5.13	1.58	1.70	2.92	34.06
1872												.81	
1873	2.70	2.25	1.70	5.50	4.35	3.20				1.88	1.60	4.23	
1874	2.70	2.60	1.98	3.06	1.13	2.30	.80	1.93	1.35	.50	2.55		
1875	.44	1.51	5.19	.68		3.73	8.77			2.25	.62	1.33	
1880											1.80	1.53	
1881	.89	6.49	5.30	1.36	1.95	4.71	1.07	.64	4.89	5.77	7.78	8.54	49.39

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

URBANA, CHAMPAIGN COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1882	1.99	5.49	4.54	3.86	8.55	9.93	2.44	4.87	2.06	5.53	2.42	2.21	53.89
1902	.....	.....	.....	.....	.....	.....	.....	9.79	4.90	2.10	2.43	2.94	.....
1903	1.04	2.40	1.43	5.71	3.95	2.56	5.13	2.33	.99	2.70	2.06	2.18	32.48
1904	3.09	1.86	7.66	3.97	1.60	1.17	2.72	3.55	2.53	.81	T	.83	29.79
1905	1.80	2.27	.75	2.95	4.24	1.30	5.40	2.14	2.83	3.11	1.45	1.31	29.60
1906	1.65	1.11	4.61	2.23	3.31	3.08	2.16	4.57	2.45	1.36	4.59	3.13	34.25
1907	6.09	.24	3.34	2.34	5.04	5.56	5.41	.42	.94	1.51	1.99	3.32	40.20
1908	1.21	4.09	3.20	5.00	7.83	1.99	2.31	2.05	1.95	.21	1.99	1.44	33.27
1909	2.17	5.80	1.76	7.44	5.58	3.75	7.57	2.37	2.36	2.25	3.45	2.55	47.05
1910	2.23	1.79	.38	1.57	5.35	2.99	2.76	2.62	4.14	1.34	1.20	1.59	27.96
1911	2.27	1.19	1.85	3.59	2.44	.82	.62	3.35	8.90	3.10	2.83	1.35	32.31
Means	1.96	2.66	2.98	3.73	4.34	3.57	3.40	3.19	3.22	2.25	2.55	2.45	37.02

NOTE—Values for 1857-59, inclusive, are for West Urbana. Values for 1872-74, inclusive, and for December, 1875-December, 1882, inclusive, are for Champaign. All other values are for Urbana.

VANDALIA, FAYETTE COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1886	.....	.....	.....	.....	4.30	4.66	0.80	5.10	5.59	0.53	3.72	0.38	.....
1887	0.43	2.55	4.15	.....	2.91	.93	.31	1.68	2.50	1.35	8.95	5.04	.....
1888	1.50	1.65	2.32	.70	6.01	6.95	4.54	4.76	1.25	2.75	4.20	1.60	38.23
1889	2.20	1.40	.70	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	1.38	1.87	2.39	.....	4.41	4.18	1.88	3.85	3.11	1.54	5.62	2.34	.....

VERNON, MARION COUNTY, ILLINOIS

Elevation, 515 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.32	1.97	3.31	.....
1900	0.75	3.91	1.40	1.05	8.02	9.03	5.38	2.93	4.33	3.20	2.51	1.01	43.52
1901	1.62	1.86	3.21	1.97	2.24	2.07	2.95	1.61	.71	2.59	1.44	3.24	25.51
1902	1.15	1.07	4.24	2.20	2.04	6.62	*2.02	4.08	2.82	1.52	2.77	3.06	33.59
1903	1.05	2.51	3.47	4.36	.62	2.60	2.93	2.87	1.48	3.05	.87	1.72	27.53
1904	3.37	.25	6.43	4.43	4.82	2.50	3.48	5.32	3.98	.81	.50	1.35	37.24
1905	1.05	1.65	2.65	4.57	4.97	5.47	9.72	2.36	2.55	5.87	2.69	2.06	45.61
1906	4.50	2.40	5.36	2.25	2.30	3.12	1.00	4.00	4.70	1.05	5.42	3.19	39.29
1907	6.82	.88	4.77	3.45	3.82	4.96	4.56	6.55	.51	4.08	2.50	3.46	46.36
1908	1.53	4.98	2.97	5.22	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	2.43	1.72	3.83	3.28	3.60	4.55	4.00	3.72	2.64	2.83	2.41	2.49	37.33

* Values for Greenville, seventeen miles from Shobonier.
NOTE—Values for April, 1906, are for Shobonier, four miles distant.

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

WALNUT, BUREAU COUNTY, ILLINOIS
Elevation, 717 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1892	2.30	1.48	3.00	4.06	8.49	7.84	5.41	0.96	3.42	1.06	1.73	1.94	41.69
1893	1.55	1.78	3.13	5.02	1.65	4.54	.86	.48	3.38	.23	2.11	2.05	26.78
1894	2.11	2.10	2.98	1.23	3.57	3.00	.26	1.35	6.89	1.43	1.52	.61	27.05
1895	1.92	.55	.86	1.02	2.39	.92	5.41	3.23	2.71	.64	2.60	3.55	25.80
1896	.87	1.57	1.51	5.17	4.12	3.81	6.32	2.63	5.94	1.20	2.06	.17	35.37
1897	5.01	1.45	5.05	3.71	1.25	4.94	1.35	1.33	3.43	.25	2.27	1.31	31.35
1898	3.96	2.08	5.22	2.78	5.22	3.98	1.20	5.51	4.47	2.63	1.70	.96	39.71
1899	.36	1.57	1.99	1.82	6.68	1.69	5.05	2.95	1.91	2.78	.84	1.57	29.21
1900	1.50	2.78	3.17	1.35	3.88	3.03	6.12	6.60	4.74	3.48	1.64	.29	38.58
1901	1.03	1.25	2.57	.51	2.43	4.16	3.53	1.58	2.06	.82	1.37	1.25	22.56
1902	3.8	1.38	2.09	1.53	6.50	8.89	11.01	4.63	4.99	3.63	1.89	1.81	48.73
1903	1.57	1.88	2.65	4.38	4.59	1.96	5.38	4.53	6.69	2.98	.53	1.32	38.46
1904	2.22	1.55	2.89	1.69	3.31	1.38	5.34	4.53	3.96	.37	.06	2.18	29.48
1905	.74	1.86	3.63	3.88	5.01	5.20	2.19	4.88	2.77	3.02	1.18	1.42	35.78
1906	2.92	2.87	5.22	2.07	4.17	3.94	1.68	3.07	4.02	1.22	2.79	2.52	36.49
1907	3.97	.25	2.23	2.57	4.13	3.44	9.53	4.67	4.84	.51	1.41	.92	38.47
1908	.85	3.82	3.34	2.74	9.89	2.90	2.85	4.94	1.26	.58	2.31	.66	36.14
1909	1.66	3.91	1.06	5.94	3.14	3.09	1.83	.309	2.41	2.09	5.24	4.37	37.83
1910	1.86	1.07	.30	2.42	4.84	.69	1.34	4.12	4.81	.91	.60	1.16	24.12
1911	1.25	2.26	.78	3.66	2.60	4.56	3.11	5.64	7.80	2.90	3.15	1.95	39.66
Means	1.90	1.88	2.68	2.88	4.40	3.70	3.99	3.53	4.12	1.64	1.82	1.60	34.16

WARRENSBURG, MACON COUNTY, ILLINOIS
Elevation, 680 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1872	1.10	1.25	2.32	2.00	2.85	7.50	4.60	1.55	2.61	.....	0.90	1.45	28.13
1873	3.30	2.65	.65	6.40	2.95	1.65	3.80	.....	2.90	1.95	2.40	2.75	31.40
Means	2.20	1.95	1.48	4.20	2.90	4.58	4.20	0.78	2.76	0.98	1.65	2.10	29.76

WARSAW, HANCOCK COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1856	.....	.....	.....	.....	5.28	.....	7.81	1.61	2.33	5.25	4.00	4.97	.....
1857	0.82	5.14	1.08	1.14	1.62	3.36	.85	3.45	1.82	2.11	2.57	.83	24.79
1858	.34	1.85	3.37	7.41	10.36	5.42	6.32	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1868	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.04	.....
1869	2.22	1.88	1.56	4.80	8.66	5.90	8.42	6.71	5.90	1.92	3.71	2.19	53.87
1870	2.20	.05	4.45	.84	1.97	2.89	1.41	5.23	4.12	5.08	1.53	1.29	31.06
1871	4.58	2.21	3.51	2.81	3.48	6.91	2.34	2.25	1.00	6.73	3.83	1.44	41.09
1872	.20	3.00	3.01	5.39	4.57	5.43	7.27	3.38	2.50	.62	1.50	1.68	38.10
1873	4.36	.93	1.38	7.28	4.68	1.05	7.56	.26	3.67	4.97	.....	.....	.....
1874	2.98	1.52	1.34	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1889	.....	.....	.....	1.35	3.36	1.70	3.28	.15	2.20	.14	.03	.18	.....
1890	1.80	1.00	.17	.....	2.50	2.09	1.75	1.07	3.17	1.08	1.85	.....	.....
1891	3.00	1.40	2.73	5.16	2.50	3.90	1.86	2.76	.01	.08	.25	.06	23.71
1892	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1893	.40	1.66	2.25	5.25	3.47	1.59	.88	.95	1.77	.22	.77	1.08	20.29
1894	1.74	1.20	.....	1.03	.78	1.41	.38	.01	1.60	.....	.....	.....	.....
1895	.....	.....	1.29	1.63	2.66	3.08	4.29	.....	.....	.....	.....	.....	.....
1896	.....	.....	1.50	1.67	3.05	2.39	.....	.....	.....	.....	.....	.....	.....
1897	.....	.....	2.37	1.20	.53	3.93	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1904	.....	.....	.....	.....	.....	.....	.....	.....	8.11	.....	T	.....	.....
1905	.60	1.38	1.41	2.96	3.21	6.02	3.80	2.59	4.28	3.37	1.63	.70	31.95

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

WARSAW, HANCOCK COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1906	2.58	2.84	2.97	2.58	1.86	1.87	2.11	4.38	3.78	.83	2.28	1.73	29.81
1907	5.15	T	3.83	2.48	5.27	8.12	6.45	4.29	1.76	.60	1.15	1.50	40.60
1908	.36	3.51	1.67	1.86	11.11	5.85	4.18	3.16	2.08	.87	3.34	.71	38.70
1909	1.23	2.58	2.04	4.80	4.01	6.19	5.66	.15	4.35	3.72	4.73	2.17	41.63
1910	.51	.97	.43	2.82	7.81	1.79	3.51	.83	2.59	.95	.27	.81	23.29
1911	2.52	3.39	1.40	4.56	.32	.16	5.26	1.63	7.57	2.17	2.35	2.16	33.49
Means	1.98	1.92	2.08	3.29	4.04	3.64	4.06	2.36	3.23	2.14	1.99	1.44	33.74

WATERLOO, MONROE COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1868	.....	0.20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1869	.....	1.14	3.02	3.65	4.15	.....	.....	.....	.....	.....	.....	.....	.....
1870	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1871	5.91	2.11	1.75	.65	.....	2.30	4.50	3.90	0.55	3.35	2.25	1.55	.....
1872	3.05	.89	2.40	.....	.....	.....	4.50	.75	.....	.....	.....	.....	.....
1873	.....	.....	.....	.....	.....	2.54	6.37	.22	.....	.....	.....	.....	.....
1874	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.30	.....	.....	.....
Means	4.48	2.17	3.58	2.15	.....	2.42	7.68	2.44	.....	2.42	.....	.....	.....

WAUKEGAN, LAKE COUNTY, ILLINOIS

Elevation, 640 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1886	.....	.....	3.28	1.57	4.91	1.68	1.97	6.70	4.51	1.70	1.25	2.25	.....
1887	4.30	6.80	.90	.76	2.91	.....	.....	.....	.....	.....	.....	.....	.....
Means	.....	.....	2.09	1.16	3.91	.....	.....	.....	.....	.....	.....	.....	.....

WAVERLY, MORGAN COUNTY, ILLINOIS

Elevation, 680 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1862	.....	.....	.....	.....	3.95	4.40	4.50	1.75	2.55	2.60	3.55	4.05	.....
1863	.....	.....	3.15	.....	1.15	.25	7.30	4.10	3.15	3.30	1.85	6.10	.....
1864	2.70	0.70	.80	4.55	1.25	.60	2.15	1.55	3.65	1.75	6.40	2.75	28.85
1865	.20	5.85	5.55	3.40	.....	2.65	6.70	.50	4.20	2.10	.....	2.15	.....
Means	1.45	3.27	3.17	3.98	2.12	1.98	5.16	1.98	3.39	2.44	3.93	3.76	.....

WAYNESVILLE, DEWITT COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1858	.....	1.05	.....	5.75	7.12	6.00	3.88	1.62	4.00	2.63	3.12	2.22	.....
1859	1.53	1.99	3.08	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	.....	1.52	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

WEST SALEM, EDWARDS COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1856	.....	2.30	0.65	1.05	2.93	1.87	6.93	4.86	0.86	1.07	3.64	2.95	.....
1857	.....	4.52	1.13	1.70	4.37	6.83	3.24	5.75	1.37	1.19	5.29	3.24	.....
1858	3.47	2.44	3.74	5.28	8.33	5.66	5.08	1.45	2.19	4.08	3.28	6.00	51.00
1859	2.26	4.60	4.02	5.91	2.78	2.64	4.14	1.62	3.62	.93	4.17	4.33	41.02
1860	.....	.....	.66	5.04	4.09	5.51	.....	.....	6.11	1.45	.....	.....	.....
Means	2.86	3.46	2.04	3.80	4.50	4.50	4.85	3.42	2.83	1.74	4.10	4.13	46.01

WHEATON, DUPAGE COUNTY, ILLINOIS

Elevation, 769 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1857	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.92	.....
1858	2.30	2.14	2.80	4.68	6.72	3.69	3.15	8.23	4.05	3.55	4.82	5.25	51.38
1859	1.88	1.16	7.28	3.28	4.17	2.47	1.28	1.41	2.03	2.25	2.31	1.26	30.78
1860	.....	2.95	2.93	6.04	3.29	2.07	4.27	5.05	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	.....	.....	.....	3.43	2.70	1.54	.87	4.23	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1890	3.85	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1895	.....	.....	.....	.....	2.95	1.39	3.47	4.99	1.52	1.16	5.00	5.78	.....
1896	1.09	2.30	2.11	4.50	7.07	2.83	5.14	2.48	9.09	.53	3.78	.55	41.47
1897	6.61	2.27	5.43	4.36	1.02	4.22	3.09	1.11	1.10	.49	2.97	.99	33.66
1898	3.67	2.20	6.04	1.31	4.20	6.03	1.90	5.69	4.64	5.13	2.34	1.86	45.02
1899	.74	1.78	2.36	.41	7.15	1.39	6.66	1.96	2.21	2.12	1.41	1.86	30.05
1900	1.43	4.09	1.66	.93	3.33	2.84	3.97	3.53	2.39	2.29	2.77	.60	29.83
1901	1.42	1.68	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	2.55	2.29	3.83	3.22	4.26	2.85	3.38	3.87	3.38	2.19	3.18	2.12	37.46

WHITE HALL, GREENE COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1884	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.55	.....
1885	1.65	0.85	0.20	5.10	3.00	8.87	.....	.....	.....	.....	.....	1.90	.....
1886	1.35	.95	1.16	5.00	5.75	4.44	.....	5.87	6.74	1.13	1.63	1.62	35.64
1887	1.45	3.75	1.28	3.05	4.41	1.07	0.40	1.37	2.65	.58	1.86	2.37	24.24
1888	2.86	2.10	3.35	.99	5.48	5.41	4.52	5.43	2.10	1.83	2.09	.00	36.16
1889	2.12	2.10	2.51	1.09	10.63	3.87	4.07	1.04	4.22	3.34	4.08	.06	39.13
1890	6.70	2.55	2.12	2.09	3.02	3.81	2.09	1.63	2.04	1.05	.94	.43	28.47
1891	1.21	2.72	1.88	1.89	1.83	6.49	.92	2.54	2.02	1.39	4.69	.93	28.51
1892	1.75	4.09	2.30	6.29	9.20	2.59	6.16	.87	1.99	1.44	2.79	1.94	41.41
1893	.47	2.31	4.62	9.31	4.47	5.08	1.80	.36	1.21	1.30	.....	.....	.....
1894	.....	.....	2.37	2.02	2.32	1.90	.....	.....	3.76	.93	1.38	3.47	.....
1895	.....	.59	1.88	2.61	2.01	.....	.....	3.25	3.97	.52	2.27	6.70	.....
1896	1.41	1.24	1.45	1.86	6.94	2.92	6.42	2.19	4.58	1.37	1.50	.50	32.38
1897	4.99	1.21	4.63	4.33	2.09	4.89	6.54	.01	.59	.31	5.00	1.94	36.53
1898	5.10	2.00	6.36	5.16	7.33	2.94	*4.02	*3.43	4.24	3.57	1.84	1.82	47.81
1899	1.35	2.01	2.75	1.30	8.01	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1902	.....	.....	.....	2.06	2.23	8.93	3.20	6.07	4.66	2.36	3.69	3.14	.....
1903	1.22	3.27	3.11	3.57	2.23	.....	.....	.....	4.73	1.39	.28	1.40	.....
1904	2.30	.24	5.77	7.34	4.46	4.83	7.08	4.63	6.95	.50	.10	1.20	45.40
1905	2.20	1.40	2.26	2.51	6.92	3.82	8.05	5.95	6.02	4.90	2.20	1.85	48.08
1906	3.15	4.45	5.40	3.55	5.90	2.55	1.06	.....	4.88	2.35	3.82	4.60	.....
1907	5.32	.90	3.01	3.13	3.70	6.00	9.88	.....	1.55	3.75	3.25	.....	.....
1908	.....	.....	.....	.....	.....	.....	.....	.97	1.72	.25	2.44	1.64	.....

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

WHITE HALL, GREENE COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1909	3.28	4.33	1.50	4.45	5.62	4.18	6.02	1.48	4.74	5.48	5.85	2.38	49.31
1910	1.90	1.70	.05	3.34	7.18	1.80	4.26	1.12	7.29	1.89	.69	.83	32.05
1911	3.63	2.67	1.98	3.97	1.10	1.28	3.12	5.69	8.13	2.51	2.94	2.20	39.22
Means	2.64	2.16	2.69	3.58	4.83	4.18	4.19	2.84	3.95	1.92	2.52	1.93	37.62

* Interpolated from surrounding stations.

NOTE—Values 1894-1907, are for Carrollton. All other values are for Whitehall. These stations are fifteen miles apart.

WILTON CENTER, WILL COUNTY, ILLINOIS

Elevation, 600 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1884	.....	.....	.....	.....	.....	.....	3.14	3.31	3.62	5.45	1.48	4.84	.....
1885	3.62	2.76	0.63	3.37	1.61	1.45	4.70	7.79	3.34	.....	.....	.....	.....
Means	.....	.....	.....	.....	.....	.....	3.92	5.55	3.48	.....	.....	.....	.....

WINCHESTER, SCOTT COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1887	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.70	6.00	.....
1888	6.60	2.50	3.90	1.70	8.35	9.19	5.45	0.80	2.45	2.53	4.34	1.53	.....
1889	2.88	1.45	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1897	.....	.....	.....	.....	.....	.....	.....	.....	.....	.38	3.87	2.89	.....
1898	5.75	2.90	5.55	3.87	8.50	5.21	3.30	5.13	5.62	3.75	3.00	1.79	54.37
1899	1.41	2.34	3.47	1.71	9.13	3.06	3.04	2.95	4.67	3.47	2.28	1.56	39.09
1900	.94	5.06	.13	1.31	3.96	4.28	4.75	1.52	5.56	3.07	1.79	.26	32.63
1901	2.31	1.60	3.03	1.48	1.45	1.91	1.56	.47	1.95	3.36	1.29	2.53	22.94
1902	1.52	.....	4.29	3.37	4.80	7.49	3.36	5.63	4.06	2.85	3.48	3.46	.....
1903	1.70	3.89	4.45	4.34	3.24	3.04	3.30	3.01	4.16	2.45	.58	1.57	35.73
1904	3.14	1.66	3.69	5.57	4.60	4.36	4.15	4.50	7.06	.09	.05	.95	39.82
1905	1.57	1.57	1.60	2.02	2.21	2.67	2.81	4.57	5.23	4.37	1.47	1.36	31.45
Means	2.78	2.55	3.35	2.82	5.14	4.58	3.52	3.18	4.53	2.63	2.35	2.17	36.57

WINDSOR, SHELBY COUNTY, ILLINOIS

Elevation, 716 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1885	.....	.....	.....	.....	.....	.....	.....	11.02	6.69	4.19	1.76	3.80	.....
1886	4.32	1.22	2.60	2.17	5.53	6.59	1.51	3.08	3.82	1.04	2.37	1.85	36.10
1887	1.49	3.38	2.66	2.34	4.25	1.01	2.89	2.13	2.79	.82	5.62	4.94	34.32
1888	2.70	2.47	3.37	2.17	5.34	7.09	2.36	3.56	1.28	2.60	3.20	2.34	38.49
1889	1.97	1.41	1.69	.71	7.36	6.53	5.70	1.93	4.26	2.06	4.47	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1904	3.22	.91	7.18	3.42	3.23	1.43	4.10	4.56	4.13	.46	.09	1.23	33.96
1905	3.00	1.57	1.86	2.22	4.40	3.46	8.06	1.34	1.14	4.21	1.52	2.14	33.92
1906	2.88	1.80	4.90	2.23	2.64	2.88	1.34	3.41	4.09	1.58	3.50	3.11	34.36
1907	4.99	.48	3.88	2.22	3.82	4.40	5.63	4.60	1.57	1.30	1.92	3.22	38.03
1908	1.38	5.32	2.54	5.91	13.26	3.51	2.40	2.62	2.00	.11	3.34	1.50	43.89

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Continued*

WINDSOR, SHELBY COUNTY, ILLINOIS—*Concluded*

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1909	2.42	4.16	1.94	9.23	5.49	3.95	6.80	1.20	2.94	2.76	3.73	2.25	46.87
1910	1.73	2.84	.43	2.83	6.32	2.73	5.68	3.55	4.33	2.61	4.65	1.82	39.52
1911	2.22	1.91	1.87	4.50	4.46	1.49	1.92	4.18	14.76	3.78	2.80	1.56	54.45
Means	2.69	2.29	2.91	3.33	5.51	3.76	4.03	3.63	3.91	2.12	3.00	2.48	38.63

WINNEBAGO, WINNEBAGO COUNTY, ILLINOIS
Elevation, 900 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1857	*1.14	*5.29	3.26	2.39	3.64	8.34	4.01	6.10	2.56	4.76	1.91	1.30	44.70
1858	2.37	1.29	2.08	3.98	6.87	7.45	3.36	2.85	5.59	2.94	4.50	1.88	45.16
1859	1.28	1.36	4.88	3.44	2.82	2.42	1.89	1.34	2.57	.68	3.04	.79	26.51
1860	1.14	2.00	.78	1.19	4.28	4.47	*3.26	2.26	5.48	2.17	2.44	3.30	32.77
1861	2.66	4.87	2.41	4.98	5.39	1.33	5.78	3.05	6.89	3.56	1.75	1.84	44.51
1862	3.78	1.02	2.16	5.59	3.67	3.09	*9.99	6.98	5.96	2.76	.93	1.52	47.45
1863	2.86	*1.04	1.65	*1.70	5.05	1.67	2.10	2.24	1.63	3.49	2.22	3.62	29.27
1864	2.05	.30	2.71	2.66	1.46	1.13	5.83	1.88	3.57	2.28	2.27	2.76	28.90
1865	.27	3.25	3.58	4.33	1.56	4.66	6.17	7.22	9.09	3.53	.42	.74	44.82
1866	2.49	.98	2.00	3.06	1.90	4.45	5.03	7.52	4.19	2.86	.59	3.84	38.91
1867	2.86	2.83	1.58	1.43	4.65	3.74	1.58	3.33	1.53	.50	1.68	1.03	26.74
1868	.82	.77	4.98	4.43	3.82	5.12	2.93	1.60	5.23	1.00	3.31	1.30	35.31
1869	1.39	2.14	.95	2.76	5.53	7.01	2.91	4.22	3.85	.83	2.76	2.86	37.21
1870	2.87	.75	3.41	1.32	1.25	2.12	3.74	3.66	3.92	2.75	.60	.78	27.17
1888	†1.72	†1.30	†3.03	2.20	5.69	1.13	7.63	2.27	1.18	1.75	2.17	2.65	32.72
1889	2.18	2.00	1.40	4.14	5.42	3.20	2.77	.10	1.66	.62	1.73	2.83	28.05
1890	3.39	2.73	1.64	3.50	4.35	10.15	.40	2.55	.50	6.40	2.10	1.40	39.11
1891	2.30	1.55	4.25	4.17	2.50	3.45	2.13	1.24	.99	1.49	3.71	2.26	30.04
1892	2.60	1.76	1.95	4.40	8.33	10.29	3.85	5.15	1.74	.50	2.12	2.38	45.07
1893	2.04	2.04	2.30	4.66	2.72	3.26	2.61	.80	2.68	2.45	1.67	1.29	28.52
1894	1.48	1.25	3.55	2.74	3.51	2.03	1.48	1.27	5.15	1.81	1.79	.33	26.39
1895	1.42	.39	1.90	.70	4.07	1.89	3.89	2.92	2.29	.80	3.07	2.07	25.41
1896	.65	1.54	1.28	3.63	6.50	2.94	4.95	1.92	5.61	.75	2.18	.58	32.53
1897	3.74	1.38	4.87	3.63	1.31	4.70	3.82	1.37	1.01	.58	1.28	1.58	29.27
1898	2.95	3.07	3.95	3.39	3.52	3.65	2.74	7.13	2.47	3.80	1.81	.71	39.19
1899	.53	1.49	1.87	2.14	6.56	2.15	6.18	2.57	1.68	2.22	1.52	1.98	30.89
1900	2.20	3.22	2.07	2.98	4.96	2.67	5.81	5.88	3.58	3.70	2.10	.57	39.74
1901	1.10	1.47	3.52	.43	2.79	2.83	3.76	1.21	3.15	.92	1.20	2.05	24.43
1902	.63	1.43	2.86	1.74	7.62	8.76	5.85	1.53	4.71	1.62	3.06	2.10	41.91
1903	.58	1.81	3.51	4.91	3.73	2.75	4.93	7.66	5.49	4.35	1.15	1.68	42.55
1904	1.74	1.38	4.55	3.41	3.17	1.53	3.41	2.95	4.11	1.95	.13	3.34	31.67
1905	.66	1.69	3.77	3.59	6.38	3.76	3.67	3.83	.77	4.10	2.29	1.48	35.99
1906	3.72	2.17	3.24	2.09	4.05	4.93	2.83	6.02	4.68	2.56	2.85	1.59	40.73
1907	3.68	.76	1.49	3.46	3.20	5.81	6.65	4.09	6.45	.71	1.45	1.77	39.52
1908	1.00	2.57	5.41	4.48	8.17	3.51	4.59	2.85	1.15	1.02	3.66	.85	39.26
1909	2.52	2.63	1.41	7.75	3.47	4.52	1.03	6.82	3.18	1.11	4.00	4.32	42.76
1910	2.41	.69	.36	4.56	3.47	1.01	2.32	3.70	2.61	.78	1.90	.91	25.98
1911	.91	3.13	.61	5.42	2.75	3.20	1.09	7.58	7.57	3.32	4.65	2.10	42.33
Means	1.96	1.87	2.66	3.36	4.25	3.98	3.88	3.63	3.59	2.19	2.16	1.88	35.36

* Values are for Riley.
† Values are for Rockford, in the same county.

WOODSTOCK, M'HENRY COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1887	3.77	4.73	1.01	2.11	.....	1.48	2.09	3.34	4.31	.....	.....	3.84	.....
1888	1.32	2.65	3.23	.....	.....	.....	.....	.....	.82	.....	.....	2.55	.....
1889	2.25	.....	.....	.....	.....	4.40	.....	.....	.....	.....	2.88	2.20	.....
1890	3.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	2.60	3.69	2.12	.....	.....	2.94	.....	.....	2.56	.....	.....	2.86	.....

TABLE NO. 4—PRECIPITATION RECORDS IN ILLINOIS—*Concluded*

YORKVILLE, KENDALL COUNTY, ILLINOIS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1880	3.84	3.84	1.64	4.92	6.72	3.36	6.00	6.84	2.88	2.04	1.20	.00	43.28
1881	1.44	3.72	3.60	1.44	1.68	5.88	2.16	.30	3.84	7.20	5.04	2.93	39.23
1882	1.20	3.00	3.00	5.82	4.80	6.54	3.60	5.28	1.44	2.72	1.86	2.10	41.36
1883	1.68	5.05	.63	3.68	6.49	3.35	3.37	.54	1.26	6.60	4.81	1.25	38.71
1884	.75	2.61	2.00	2.34	2.44	3.16	5.95	3.27	3.04	5.03	1.62	3.95	36.16
1885	2.14	1.37	.14	2.87	2.48	4.92	3.42	6.22	4.02	3.71	1.63	2.51	35.43
1886	2.94	1.68	3.17	4.04	3.85	2.17	.33	4.27	4.53	1.20	.86	1.01	30.05
1887	2.98	4.29	.80	.48	2.78	.29	1.21	3.48	2.70	2.34	1.78	4.25	*27.38
1888	1.46	1.54	2.77	1.59	4.67	1.29	3.58	1.09	1.22	2.73	3.21	2.22	27.37
1889	1.57	1.03	1.28	2.23	3.12	4.98	4.44	.75	3.44	1.00	2.83	1.91	28.58
1890	2.44	1.30	2.89	2.58	5.27	6.98	1.19	2.65	2.17	4.60	1.89	.75	34.71
1891	2.71	2.32	2.33	3.97	1.97	2.93	3.07	4.36	1.20	.64	4.42	1.93	31.85
1892	1.74	1.17	2.32	3.45	8.05	10.51	4.71	1.71	2.32	.96	2.11	1.97	41.02
1893	1.85	3.16	2.68	4.80	2.59	3.27	1.99	.22	2.88	2.28	2.25	1.85	29.82
1894	2.31	1.10	2.68	2.82	2.82	2.20	.50	1.49	7.35	1.34	1.79	.77	27.17
1895	1.33	.38	1.35	1.56	3.27	1.64	3.61	5.00	.59	1.05	4.53	6.10	30.41
1896	1.09	1.90	1.71	3.48	7.52	1.75	5.32	4.03	7.51	.31	3.30	.15	38.07
1897	6.06	1.60	3.56	2.36	1.19	5.19	3.63	1.77	.86	.15	3.71	1.58	31.66
1898	3.86	2.59	4.11	1.48	5.50	4.51	2.23	3.75	3.81	4.32	2.81	1.52	40.46
1899	.73	1.67	2.70	.46	7.28	1.55	4.83	2.27	2.23	2.13	1.05	1.65	28.55
1900	1.68	3.72	1.70	.79	4.17	2.14	3.84	4.23	2.53	2.83	2.66	.13	30.42
1901	1.17	1.26	4.05	.31	.67	1.71	3.34	.80	3.36	1.08	.99	1.23	19.97
1902	.56	2.05	2.70	1.15	7.06	14.44	7.99	2.96	8.23	1.80	3.26	1.80	53.97
1903	.80	1.78	3.23	3.14	3.01	4.72	5.07	5.15	6.76	2.40	.36	1.56	37.95
1904	2.05	1.74	4.96	5.23	2.79	1.91	3.88	4.21	3.82	1.44	.00	2.18	34.21
1905	.63	2.12	2.38	4.04	5.96	4.62	3.90	2.91	1.77	1.68	2.46	1.41	33.88
1906	1.94	.83	1.31	1.97	5.09	2.20	1.61	3.90	10.25	2.40	1.44	1.85	34.79
1907	3.68	.17	2.58	1.55	4.60	5.22	6.23	6.37	5.21	1.07	1.25	.83	38.76
1908	.78	2.10	2.20	*3.10	6.18	1.65	3.96	5.90	.95	.75	1.84	.72	30.13
1909	1.06	1.70	.85	8.41	2.21	5.21	2.24	2.09	3.32	1.41	4.82	1.46	34.78
1910	1.49	.46	.07	4.16	4.49	1.02	1.59	3.90	5.58	1.32	1.05	.80	25.93
1911	1.16	2.07	.61	4.31	3.05	5.57	2.05	4.23	10.16	4.04	2.08	2.46	41.79
Means	1.92	1.92	2.25	2.95	4.18	3.97	3.47	3.31	3.84	2.34	2.38	1.88	34.63

* Estimated.
Values from 1880–99 are for Oswego, five miles distant.

ZION, CARROLL COUNTY, ILLINOIS

Elevation, 938 feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1894	.....	.....	.....	.....	*0.86	3.00	0.33	3.19	6.49	3.68	1.60	0.63	.....
1895	1.82	0.29	0.70	0.18	4.64	1.99	4.77	1.79	2.07	.93	1.82	1.58	22.58
1896	1.02	1.80	.91	5.78	8.35	2.18	4.05	3.78	4.53	1.50	.71	1.03	35.64
1897	2.22	1.17	3.28	3.16	2.21	4.22	2.22	1.82	2.90	.85	1.55	2.68	28.28
1898	3.95	2.80	3.83	3.07	3.22	.....	.....	.....	.....	.....	.....	.....	.....
1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1900	.....	.....	.....	1.82	3.14	1.15	3.74	2.59	1.84	1.21	1.44	.60	.....
1901	1.00	1.60	2.21	.73	2.56	3.01	1.53	.05	2.10	2.84	.55	.35	18.53
1902	.50	1.80	2.01	1.89	4.69	7.80	8.70	2.89	4.04	1.52	3.12	2.49	41.45
1903	.50	1.17	2.40	4.22	5.28	1.55	9.45	5.51	6.39	1.78	1.13	1.70	41.08
1904	.65	.60	3.90	3.12	3.33	2.24	2.73	4.29	6.81	2.36	T	2.25	32.28
1905	.70	2.18	2.20	2.18	5.13	4.84	1.63	6.26	1.49	3.73	3.67	.44	34.45
1906	3.52	1.26	3.10	2.14	2.72	6.71	3.19	5.38	2.31	2.20	1.79	2.08	36.40
1907	2.75	.34	.77	1.94	3.45	4.80	6.91	2.43	5.05	1.06	1.99	.35	31.84
1908	.90	2.24	3.10	2.63	6.87	3.74	5.89	2.67	1.30	1.37	1.80	1.10	33.61
1909	1.88	2.79	1.58	6.48	3.06	4.15	2.19	3.90	3.00	1.84	4.32	3.62	38.88
1910	2.08	.87	.29	3.48	4.73	1.28	1.58	3.41	3.51	1.20	.91	1.01	24.35
1911	.20	2.64	1.02	6.37	3.26	3.12	5.29	9.72	4.26	2.21	3.41	1.56	43.06
Means	1.58	1.57	2.09	3.08	3.97	3.48	4.01	3.73	3.63	1.89	1.86	1.47	33.03

* Ten days missing.

PART III

EVAPORATION

Precipitation, after it falls upon the surface of the earth, disappears in a number of ways. Part passes off immediately as surface flow into the streams and forms what may be called flood flow; a part is evaporated from the general surface of the ground; and a portion percolates into the ground. Of the last portion, a part is caught by the roots of vegetation, passed upwards, and evaporated or transpired from the leaves, and a part passes on, downwards and laterally, finding its way to the surface again in the form of springs, which constitute the source of the dry-weather flow of streams, or it goes to maintain some artesian supply.

The total flow of a stream is therefore, in general, equal to the rainfall less the evaporation; the flood flow is equal to the rainfall less evaporation and percolation; and, finally, the dry-weather flow may be considered as equal to the deeper or more permanent percolation. To enable stream flow data to be used in an intelligent way, it is therefore desirable to have a knowledge of the amount of evaporation and percolation.

In general, the amount of percolation may be approximately determined by subtracting the flood flows of a stream from its total flow, providing the storage afforded by swamps, ponds, and lakes, is insignificant.

The subject of evaporation naturally divides itself into two parts: evaporation from land-surfaces and evaporation from water-surfaces. The former is difficult to determine since the conditions affecting it are so varied and indeterminate. The subject is beyond the scope of this publication and has not been considered. For information on this subject the reader is referred to articles by Greaves, FitzGerald, Harrison, Vermeule, and others.

Evaporation from water-surfaces may be comparatively easily obtained by direct experiment. Considerable reliable data have already been published. Some of the data in the following tables have never been published before. By a judicious use of the data in these tables, it is believed that the evaporation from any water surface in the State of Illinois may be determined within 20 per cent of the true value, which is sufficiently close for most purposes.

The United States Weather Bureau started a detailed study of the subject of evaporation in 1907. The methods and results of its works as far as published may be consulted in the following Monthly Weather Reviews: July, 1907, February, 1908, Annual Summary, 1908, February, April, and May, 1909, and February, 1910.

There is also published in the Monthly Weather Reviews from June, 1908, to June, 1909, a very complete and interesting Annotated

Bibliography of Evaporation, by Grace J. Livingston, for the years 1670 to 1909. This bibliography includes not only titles but gives a summary of each reference, which makes it of especial value.

EVAPORATION RECORDS

Records of evaporation from water-surfaces in Illinois are not available. Tables Nos. 1 to 5 give the evaporation as observed in states adjoining Illinois or subject to about the same climatological conditions. Tables Nos. 6 and 7 contain data that may be found useful in making comparative studies. The monthly percentages in Table No. 7 are of use in obtaining an approximation of the yearly evaporation from incomplete yearly records. The following brief description of the different tables gives the general conditions under which the data were obtained.

Table No. 1.—At Iowa City, Iowa, the apparatus consists of two evaporation pans, 3 feet square and 18 inches deep, which are the standard dimensions. One of these pans is floated in the Iowa River near the shore by means of timbers. The other pan is set in the ground on top of the river bank a short distance from the river. A rain gage is located near the pan set in the ground. It is assumed in working up the evaporation from the floating pan that the rainfall is the same at both pans.

The observations at the pan in the ground were not continued after 1909.

The observations were made by Professor Arthur G. Smith.

Table No. 2.—At Columbus, Ohio, the apparatus consists of a standard evaporation pan floated by means of cylindrical floats at the center of a triangular shaped raft anchored in the reservoir of the city waterworks. The raft serves to protect the pan from waves, and as a support for the rain gage and for the observer while making the observations.

The observations are made by one of the city employees.

Table No. 3.—At Madison, Wis., the apparatus consists of a standard evaporation pan floating in a marsh on the south shore of Lake Mendota. The reeds and grass were cut in the vicinity of the pan so as to allow the wind to have free sweep. The rain gage is located at the pan. The observations are made under the supervision of Professor L. S. Smith.

Table No. 4.—At Grand River Lock, Wisconsin, on the upper Fox River, a standard evaporation pan is floated in a bayou near the locks. The rain gage is located 700 feet northeast of the evaporation pan.

The observations are made by the lockmaster under the supervision of L. M. Mann, United States Assistant Engineer, Oskosh, Wis.

Table No. 5.—At Menasha, Wis., the apparatus consists of a standard evaporation pan floating in Little Lake Buttes des Morts, near the dredged channel. The rain gage is about 120 feet from the evaporation pan.

The observations are made by the lockmaster under the supervision of L. M. Mann, United States Assistant Engineer, Oskosh, Wis.

Table No. 6.—At University, North Dakota, a standard evaporation pan is floated by means of a raft in a small pond on the campus of

the University of North Dakota. The rain gage is located about 160 feet from the evaporation pan.

The observations are made under the supervision of Professor E. F. Chandler.

Table No. 7.—The data in this table, with the exception of Chestnut Hill Reservoir, Boston, Mass., and Mount Hope Reservoir, Rochester, N. Y., were obtained from publications of the United States Weather Bureau, and are the results of a year's observations made during 1909-1910.

The records for Chestnut Hill Reservoir were obtained by Fitz-Gerald. For the summer months they are the means of ten years of observations, while for the winter months they are deduced from special experiments on the evaporation from snow and ice.

The data at Mount Hope Reservoir were obtained by Kuichling since 1891, and are the means of two to eight years' observations. The values for these two stations as here published are taken from Turneaure and Russell's "Public Water Supplies."

The monthly percentages for the evaporation at Boston and Rochester being derived from the mean of several years' records are of value; while those for the other stations in Table No. 7, being derived from records of only a year or less in length, are not so valuable since the yearly evaporation varies considerably.

TABLE No. 1

EVAPORATION AT IOWA CITY, IOWA

Month	Temperature °F		Rainfall	Evaporation
	Air	Water		
FLOATING PAN				
1906			*Inches*	*Inches*
July (7-31)	67	75	.12	4.56
August	69	77	4.56	5.24
September	62	70	.32	4.35
October	44	52	1.47	2.80
November (1-17)	35	40	.38	.56
Total (July 7-November 17)			6.85	17.51
1907				
April	41	48	1.69	2.57
May	53	59	5.53	3.30
June	64	71	6.29	3.08
July	72	77	9.08	4.90
August	69	75	2.78	4.76
September	60	68	2.55	3.19
October	47	55	.89	2.03
November (1-11)	36	43	.19	.37
Total (April 1-November 11)			29.00	24.20
1908				
April	48	54	2.47	2.72
May	59	63	7.21	2.96
June	66	72	2.57	4.42
July	70	78	5.45	4.56
August	67	76	6.59	4.45
September	61	73	1.75	3.41
October	45	53	2.13	3.51
November (1-10)	40	42	.10	.58
Total (April 1-November 10)			28.27	26.61

TABLE No. 1—*Concluded*

EVAPORATION AT IOWA CITY, IOWA—*Concluded*

Month	Temperature °F.		Rainfall	Evaporation
	Air	Water		
FLOATING PAN—*Concluded*				
1909			*Inches*	*Inches*
April	44	49	5.19	2.36
May	57	60	3.91	3.87
June	67	72	3.80	2.88
July	68	76	4.94	4.17
August	72	81	1.73	5.94
September	59	67	2.40	2.92
October	44	51	1.59	2.20
Total (April 1–October 31)			23.56	24.34
1910				
April	50	56	2.01	3.11
May	54	61	2.99	3.63
June	67	75	.98	5.30
July	73	80	2.17	6.47
August	69	76	4.13	5.03
September	60	67	3.27	3.19
Total (April 1–September 30)			15.55	26.73
PAN IN GROUND				
1906				
July (7–31)	67	72	.12	4.79
August	69	74	4.56	4.40
September	62	67	.32	3.62
October	44	50	1.47	2.11
November (1–17)	35	40	.38	.49
Total (July 7–November 17)			6.85	15.41
1907				
April	41	47	1.69	2.92
May	53	58	5.53	3.24
June	64	70	6.29	3.38
July	72	78	9.08	4.75
August	69	75	2.78	4.68
September	60	66	2.55	2.97
October	47	50	.39	1.37
November (1–11)	36	41	.19	*.50
Total (April 1–November 11.)			29.00	24.31
1908				
April	48	54	2.47	3.13
May	59	64	7.21	3.08
June	66	72	2.57	4.20
July	70	74	5.45	4.06
August	64	75	6.59	4.03
September	62	69	1.75	2.69
October	49	51	2.13	2.14
November (1–10)	40	39	.10	.47
Total (April 1–November 10.)			28.27	23.80
1909				
April	44	49	5.19	2.71
May	56	63	3.91	4.15
June	68	73	3.80	3.03
July	69	76	4.94	4.29
August	71	79	1.73	5.05
September	60	61	2.40	2.32
October	44	48	1.59	1.73
Total (April 1–October 31)			23.56	23.28

* Pan frozen 7–11.

TABLE No. 2

EVAPORATION AT COLUMBUS, OHIO

Month	Temperature, °F		Rainfall	Evaporation
	Air	Water		
1906			*Inches*	*Inches*
June (7–30)	74	73	1.4	6.14
July	75	74	6.07	5.44
August	80	75	8.43	5.42
September	74	71	3.62	5.59
October	60	58	3.09	6.36
Total (June 7–October 31)			22.61	28.95
1907				
April	45	42	1.44	3.06
May	61	59	5.82	4.71
June	70	69	5.09	5.59
July	78	76	6.17	6.23
August	71	74	3.44	6.54
September	68	72	2.82	6.35
October	57	58	2.29	5.20
November	49	46	2.50	2.69
Total (April 1–November 30)			29.57	40.87
1908				
April	60	55	3.11	3.04
May	67	65	3.87	4.75
June	71	73	2.04	6.38
July	74	77	3.31	6.51
August	72	75	3.17	7.08
September	67	66	.62	5.37
October	56	57	1.21	3.95
November	48	44	.80	2.00
Total (April 1–November 30)			18.13	39.08

TABLE No. 3

EVAPORATION AT MADISON, WISCONSIN

Month	Temperature °F		Rainfall	Evaporation
	Air	Water		
1906			*Inches*	*Inches*
July (15–31)	70	68	1.32	1.59
August	71	70	7.71	2.52
September	64	64	2.24	2.04
October	46	49	2.84	1.85
November (1–18)	38	41	.14	.64
Total (July 15–November 18)			14.25	8.64
1907				
April	39	43	2.37	2.15
May	51	52	2.64	3.36
June	66	67	3.18	2.89
July	74	73	6.09	2.59
August	69	66	3.91	2.90
September	60	60	4.04	2.47
Total (April 1–September 30)			22.23	16.36
1908				
May (16–31)	68	66	3.58	1.54
June	68	67	2.38	3.73

TABLE No. 3—*Concluded*

EVAPORATION AT MADISON, WISCONSIN—*Concluded*

Month	Temperature °F		Rainfall	Evaporation
	Air	Water		
1908			*Inches*	*Inches*
July	72	69	3.36	2.51
August	70	65	1.69	3.03
September	65	62	.52	2.38
October	51	50	.16	2.34
November (1–10)	33	41	.01	.58
Total (May 16–November 10)			11.70	16.12
1909				
April (22–30)	44	45	.36	.74
May	58	58	2.52	3.67
June	70	69	3.06	3.04
July	70	67	.32	3.34
August	73	70	3.57	3.03
September	60	60	2.74	1.87
October (1–16)	48	50	.49	.94
Total (April 22–October 16)			13.06	16.63
1910				
April[1]	50	49	3.39	2.15
May	55	55	3.71	3.01
June	70	64	1.33	3.35
July	75	69	.83	3.49
August	70	66	6.90	2.27
September	59	62	1.97	1.85
October[2]	51	54	.68	1.73
Total (April 1–October 31)			18.81	17.85
1911				
April (15–30)	50	48	1.13	1.25
May	64	58	2.96	2.88
June	72	67	4.24	2.40
July	72	67	1.47	2.53
August	69	65	4.53	1.81
September	62	61	7.03	1.70
October	48	51	3.75	1.89
November (1–11)	38	42	2.63	.40
Total (April 15–November 11)			27.74	14.86

[1] Six inches snow April 23; frozen April 24 and 25.
[2] Frozen October 27–29.

TABLE No. 4

EVAPORATION AT GRAND RIVER LOCK, WISCONSIN

Month	Temperature °F		Rainfall	Evaporation
	Air	Water		
1905			*Inches*	*Inches*
August (13–31)	65	73	2.60	3.20
September	61	67	3.48	4.06
October	52	57	2.50	3.22
Total (August 13–October 31)			8.58	10.48

TABLE No. 4—*Concluded*

EVAPORATION AT GRAND RIVER LOCK, WISCONSIN—*Concluded*

Month	Temperature °F		Rainfall	Evaporation
	Air	Water		
			Inches	*Inches*
1906				
May	51	58	4.42	3.58
June	62	71	9.48	3.73
July	66	75	2.77	4.74
August	67	74	6.30	3.97
September	61	68	4.15	3.34
October	44	50	5.25	1.91
November (1–11)	40	41	.07	.29
Total (May 1–November 11)			32.44	21.56
1907				
April	37	43		2.32
May	47	56	2.84	4.29
June	62	71	3.14	5.28
July	66	75	5.54	5.44
August	66	71	6.65	4.51
September	58	62	3.97	3.98
October	45	49	.93	2.44
November (1–12)	39	43	.53	.46
Total (April 1–November 12)				28.72
1908				
April	46	49	4.59	2.54
May	55	59	4.95	4.01
June	61	71	3.26	5.37
July	68	76	1.88	5.60
August	63	71	2.54	5.17
September	61	68	1.28	4.21
October	47	51	1.13	1.92
November (1–10)	39	39	.06	.29
Total (April 1–November 10)			19.69	29.11
1909				
April (6–30)	39	42	4.14	1.06
May	54	59	2.10	4.59
June	64	73	3.30	5.69
July	66	76	.40	6.47
August	68	71	3.20	4.94
September	58	63	2.49	2.95
October	43	43	.86	1.84
November (1–12)	45	47	.70	.71
Total (April 6–November 12)			17.19	28.25
1910				
April	50	51	4.16	3.11
May	54	60	2.38	5.53
June	66	72	.83	5.84
July	70	74	.67	6.25
August	62	71	4.22	5.00
September	58	64	4.78	3.49
October (1–28)	51	56	.87	2.63
Total (April 1–October 28)			17.91	31.85
1911				
April (10–30)	49	53	1.16	1.96
May	61	66	5.33	3.88
June	71	73	3.55	4.58
July	68	72	2.38	5.45
August	65	71	2.96	3.89
September	59	62	4.35	2.66
October	46	48	5.60	1.14
November	46	48	5.65	1.16
Total (April 10–November 30)			30.98	24.72

TABLE No. 5

EVAPORATION AT MENASHA, WISCONSIN

Month	Temperature °F		Rainfall	Evaporation
	Air	Water		
1905			*Inches*	*Inches*
August (16–31)	73	74	1.89	2.51
September	66	64	3.07	3.42
October	58	53	2.87	1.80
Total (August 16–October 31)			7.83	7.73
1906				
May	60	56	2.04	1.90
June	71	63	4.81	2.88
July	78	64	.79	3.69
August	80	69	1.38	3.91
September	75	66	1.57	2.28
October	58	52	3.24	1.29
November (1–14)	43	40	.....	.28
Total (May 1–November 14)			13.83	16.28
1907				
April	42	43	2.87	1.77
May	45	47	3.08	2.32
June	66	58	1.72	2.60
July	74	66	3.84	3.16
August	74	63	2.44	2.52
September	73	64	2.45	2.09
October	59	52	.22	1.27
November (1–11)	40	39	.49	.39
Total (April 1–November 11)			16.91	16.12
1908				
April	43	41	1.67	1.42
May	49	42	2.79	2.01
June	64	53	1.67	2.60
July	79	62	.50	3.30
August	73	63	1.69	2.39
September	70	62	1.45	2.24
October	49	53	.83	1.19
Total (April 1–October 31)			10.60	15.15
1909				
April (10–30)	35	39	2.60	.63
May	46	42	.81	2.41
June	65	55	2.74	2.50
July	83	78	1.03	3.18
August	76	78	4.14	1.94
September	59	69	2.50	1.49
October	47	55	1.05	1.26
November (1–15)	41	42	.95	.72
Total (April 10–November 15)			15.82	14.13
1910				
April	48	38	3.16	1.36
May	55	55	1.79	2.46
June	73	75	.28	4.71
July	80	84	1.11	4.67
August	66	78	3.53	3.22
September	60	64	7.13	1.78
October (1–28)	53	54	.97	.91
Total (April 1–October 28)			17.97	19.11
1911				
April (13–30)	48	37	.77	.70
May	62	56	3.95	2.33
June	71	77	3.85	1.98
July	77	80	1.73	4.51
August	72	74	1.97	4.4

TABLE No. 5—*Concluded*

EVAPORATION AT MENASHA, WISCONSIN—*Concluded*

Month	Temperature °F		Rainfall	Evaporation
	Air	Water		
1911			*Inches*	*Inches*
September	58	62	9.12	2.69
October	48	50	4.15	1.10
November (1–11)	37	40	2.31	.29
Total (April 13–November 11)			27.85	18.00

TABLE No. 6

EVAPORATION AT UNIVERSITY, NORTH DAKOTA

Month	Temperature °F		Rainfall	Evaporation
	Air	Water		
1905			*Inches*	*Inches*
April (17–30)		37	.20	1.78
May		48	3.35	3.48
June		58	4.05	3.89
July		70	5.48	5.46
August		69	4.54	4.02
September		61	1.62	3.75
October (1–13)		50	.01	1.37
Total (April 17–October 13)			19.25	23.75
1906				
April		52	2.09	3.52
May		57	3.06	3.68
June		69	3.09	4.13
July		73	2.56	4.83
August		73	1.09	4.92
September		67	1.61	4.04
October		47	.58	1.92
Total (April 1–October 31)			14.08	27.04
1907				
April (22–30)	34	39	.05	.46
May	44	47	.63	3.48
June	63	65	4.63	4.55
July	66	79	2.91	5.99
August	65	72	1.87	4.58
September	53		3.86	3.17
October	44		.64	1.98
November (1–10)	36		.05	.17
Total (April 22–November 10)			14.64	24.33
1908				
April (15–30)	48	39	.68	2.26
May	51	54	3.77	3.83
June	66	67	2.70	3.22
July	69	76	2.47	6.32
August	65	68	2.41	5.77
September	62	58	.50	4.24
October	46	42	.62	1.58
November (1–10)	35	32	.01	.19
Total (April 15–November 10)			13.16	27.41
1909				
April (20–30)	35	41	.53	.89
May	54	51	2.60	3.84

TABLE No. 6—*Concluded*

EVAPORATION AT UNIVERSITY, NORTH DAKOTA—*Concluded*

Month	Temperature °F		Rainfall	Evaporation
	Air	Water		
			Inches	*Inches*
*June				4.22
July	67	73	.96	5.02
August	69	72	2.59	4.19
September	58	58	.67	3.68
October	47	41	.45	1.51
Total (April 20–October 31)				23.35
1910				
April (3–30)	46	42	1.13	2.81
May	50	52	.71	5.08
June	68	70	.68	6.95
July	72	70	.76	7.01
August	64	67	.90	4.76
September	55	58	3.04	3.08
October	48	48	.61	3.32
Total (April 3–October 31)			7.83	32.96
1911				
April (22–30)	54	51	0.00	1.80
May	57	58	3.17	3.71
June	69	73	4.78	4.33
July	65	70	2.06	6.13
August	64	66	3.38	3.99
September	54	55	1.07	2.32
October	43	47	.94	1.29
Total (April 22–October 31)			15.40	23.57

* Record incomplete; evaporation interpolated.

TABLE No. 7

MONTHLY EVAPORATION AT DIFFERENT POINTS IN THE UNITED STATES

Month	California, Ohio, floating pan diameter—four feet		Birmingham, Ala., floating pan diameter—four feet		Chestnut Hill reservoir Boston, Mass., floating pan		Mt. Hope reservoir Rochester, N. Y., floating pan		Dutch Flats Neb., ground pan diameter—four feet		Deer Flat, Idaho, ground pan diameter—three feet	
	Evaporation	Per cent of yearly	Evaporation	Per cent of yearly	Evaporation	Per cent of yearly	Evaporation	Per cent of yearly	Evaporation	Per cent of yearly	Evaporation	Per cent of yearly
January	*1.00	2.2	*1.50	2.9	0.96	2.4	0.52	1.5	*1.75	2.7	*1.50	1.9
February	*1.50	3.3	*1.50	2.9	1.05	2.7	.54	1.6	*1.75	2.7	*2.25	2.8
March	*2.50	5.4	*2.25	4.4	1.70	4.3	1.33	3.9	*3.00	4.6	*4.00	5.1
April	4.12	9.0	4.45	8.6	2.97	7.6	2.62	7.6	*4.50	6.9	*7.25	9.2
May	5.07	11.0	5.91	11.5	4.46	11.4	3.93	11.4	*6.25	9.4	10.68	13.5
June	6.21	13.5	7.28	14.2	5.54	14.2	4.94	14.3	8.05	12.2	11.05	14.0
July	7.20	15.6	7.36	14.4	5.98	15.2	5.47	15.8	10.95	16.7	11.15	14.1
August	7.26	15.8	7.34	14.3	5.50	14.0	5.30	15.4	9.39	14.3	11.77	14.9
September	5.63	12.2	6.00	11.7	4.12	10.4	4.15	12.0	7.44	11.3	*9.75	12.3
October	*3.00	6.5	*4.00	7.8	3.16	8.1	3.16	9.1	5.59	8.5	5.40	6.9
November	*1.50	3.3	*2.25	4.4	2.25	5.7	1.45	4.2	*4.00	6.1	2.70	3.4
December	*1.00	2.2	*1.50	2.9	1.51	3.9	1.13	3.2	*3.00	4.6	*1.50	1.9
Year	45.99	.....	51.34	.....	39.20	.....	34.54	.....	65.67	.....	79.00	.....

TABLE No. 7—*Concluded*

Month	N. Yakima, Wash., ground pan diameter—four feet		Hermiston, Oreg., ground pan diameter—three feet		Ady, Ore., floating pan diameter—four feet		Brawley, Cal., ground pan diameter—six feet		Mommoth, Cal., ground pan diameter—six feet		Granite Reef, Ariz., ground pan diameter—four feet	
	Evaporation	Per cent of yearly	Evaporation	Per cent of yearly	Evaporation	Per cent of yearly	Evaporation	Per cent of yearly	Evaporation	Per cent of yearly	Evaporation	Per cent of yearly
January	*1.75	2.6	*1.25	1.8	0.50	0.9	3.05	2.9	4.24	3.4	4.59	4.0
February	*2.50	3.7	*1.25	1.8	1.25	2.3	5.00	4.8	5.67	4.5	*4.75	4.1
March	*6.25	9.3	*3.00	4.4	3.57	6.7	8.00	7.7	8.99	7.2	*6.25	5.4
April	7.91	11.6	7.28	10.7	6.64	12.3	10.74	10.4	12.02	9.6	*9.00	7.7
May	8.36	12.3	7.89	11.6	7.15	13.4	13.79	13.3	15.52	12.4	*11.50	10.0
June	8.90	13.1	9.54	14.0	6.99	13.1	13.68	13.2	16.75	13.3	*13.50	11.7
July	10.74	15.8	12.04	17.8	8.01	15.0	14.14	13.6	18.00	14.3	*14.25	12.4
August	9.41	13.8	11.07	16.2	9.21	17.2	11.26	10.9	13.73	10.9	14.23	12.3
September	5.51	8.1	7.35	10.9	6.13	11.5	10.15	9.8	12.16	9.7	13.76	12.0
October	3.15	4.6	3.88	5.7	2.50	4.8	6.99	6.8	9.49	7.6	11.31	9.8
November	*2.00	2.9	*2.00	2.9	1.00	1.9	4.09	4.0	5.26	4.2	7.39	6.4
December	*1.50	2.2	*1.50	2.2	.50	.9	2.66	2.6	3.70	2.9	4.65	4.0
Year	67.98	.....	68.05	.....	53.45	.....	103.55	.....	125.53	.....	115.18	.....

* Evaporation interpolated by plotting all the data available and extending the curves to cover the missing periods.

PART IV

PROFILES

No surveys for the purpose of obtaining river profiles were made under the direction of the Rivers and Lakes Commission. The following tables of distances and elevations were obtained from surveys as noted in the footnote below each table:

DISTANCES AND ELEVATIONS ALONG THE BIG MUDDY RIVER

Place	Miles above mouth	Sea level elevation of low water
		Feet
Mouth	0.0	324.2
Aldridge	3.4	325.8
St. L., I. M. and S. R. R. bridge	4.8	326.2
Rattlesnake Ferry	9.2	327.2
Mouth of Cedar Creek	16.8	327.8
Mouth of Big Run Creek	18.2	328.1
Mouth of Cascade Creek	24.6	329.5
Sandridge	27.6	330.1
Murphysboro	37.0	336.8
	46.4	336.8
De Soto	50.4	338.5
Mouth of Crab Orchard Creek	52.4	339.0
Mouth of Little Muddy River	55.2	339.6
Blairsville	61.0	343.0
St. L., I. M. and S. R. R. bridge	66.2	345.4
	72.6	348.5
Mouth of Prairie Creek	76.4	351.4
Zeigler	79.6	353.9
Plumfield	83.8	356.2
Gaging station, C. B. and Q. R. R. bridge	85.8	357.3

NOTE—From a profile made by the Topographic Branch of the U. S. Geological Survey in 1910.

DISTANCES AND ELEVATIONS ALONG THE EMBARRAS RIVER

Place	Miles above mouth	Elevation of low water above sea level
		Feet
Mouth	0.0	393.6
Bridge one mile east of Billetts	2	395.7
B. and O. bridge south of Lawrenceville	10	401.0
Big Four Railroad bridge, Lawrenceville	12	403.0
East edge Westport quadrangle	24	411.3
Westport bridge	28	411.6
Sharp bend in Sec. 24, T. 5 N., R. 13 W	34	419.0
Spencer bridge	40	422.7
Old ferry south of Greenbrier	44	428.5
Cowford bridge	49	429.7
Rafetown bridge	58	435.8

DISTANCES AND ELEVATIONS ALONG THE EMBARRASS RIVER—*Concluded*

Place	Miles above mouth	Elevation of low water above sea level
		Feet
Mouth of North Fork	67	444.9
St. Marie highway bridge	71	*449.0
Bridge at Newton	86	471.1
Sharp bend in river opposite B. M. 465.2	88	472.5
Bridge one mile north of mouth of Mint Creek	93	479.0
Bridge three-fourths mile north of mouth of Wolf Creek	98	488.3
Bridge west of Hayes School	102	493.3
Bridge west of Greenup	110	510.5

* Zero of U. S. G. S. gage at St. Marie is 447.14 feet above sea level.

NOTE—Taken from a profile made by the United States Geological Survey in 1911, in co-operation with the State of Illinois. Elevations given are the water level for July 14 and 15, 1911, and represent ordinary low water.

DISTANCES AND ELEVATIONS ALONG THE ILLINOIS AND DESPLAINES RIVERS

Place	Miles above U. S. engineer gage at Grafton, Ill.	[1]Elevation of low water of 1894	Elevation of high water of 1844
		Feet	*Feet*
Mouth of Illinois River	1.9	412.0	443.7
Mouth of Otter Creek	14.8	413.4	444.4
Mouth of Macoupin Creek	18.6	413.9	444.7
Mouth of Crawford Creek	30.5	415.2	445.3
Foot of Kampsville Dam	31.4	415.4	445.3
Head of Kampsville Dam	31.4	423.8	445.3
Mouth of Apple Creek	36.0	424.0	445.7
Mouth of Big Blue Creek	58.2	424.2	447.3
Mouth of Mauvaise Terre Creek	63.2	424.2	447.7
Mouth of McGees Creek	66.6	424.4	447.9
Meredosia	71.4	424.4	448.3
Foot of LaGrange Dam	77.5	425.0	448.8
Head of LaGrange Dam	77.5	433.0	448.8
Mouth of Crooked Creek	83.7	433.2	449.4
Beardstown	88.5	433.2	449.8
Mouth of Sugar Creek	94.4	433.2	450.4
Mouth of Sangamon River	98.0	433.2	450.7
Mouth of Spoon River (Havana)	120.0	433.9	454.2
Foot of Copperas Creek Dam	136.8	434.2	457.5
Head of Copperas Creek Dam	136.8	438.7	457.5
Mouth of Mackinaw River	150.8	438.7	459.8
Pekin	153.0	438.8	460.8
Peoria (lower wagon bridge, U. S. Weather Bureau gage)	162.2	438.8	462.6
			1904
Lacon	189.2	439.0	460.6
Foot of Henry Dam	198.1	439.2	461.0
		1901	
Head of Henry Dam	198.1	444.6	461.0
Mouth of Bureau Creek	209.0	444.8	462.3
Gaging station at LaSalle	224.5	445.5	465.0
			*1883
Mouth of Little Vermilion River	225.6	445.8	465.8
Mouth of Big Vermilion River	226.4	446.0	466.8
Utica (wagon bridge)	229.6	446.6	469.4
	234.0	453.7	473.2
Mouth of Covel Creek	236.7	454.2	475.4
Mouth of Fox River at Ottawa	239.9	456.0	477.4
Mouth of Long Creek	243.0	461.6	478.3
	243.5	461.9	478.6
	245.5	467.4	481.3
Foot of Marseilles Dam	247.1	477.0	492.0
Head of Marseilles Dam	247.1	485.4	493.0
Mouth of Mazon River	263.3	488.6	508.1
Head of Dresden Island	271.6	492.0	513.8
Mouth of Kankakee River	273.0	494.4	514.4
Mouth of Kankakee Feeder	273.7	498.8	514.8
Mouth of Dupage River	277.5	500.3	516.4

DISTANCES AND ELEVATIONS ALONG THE ILLINOIS AND DESPLAINES RIVERS
—*Concluded*

Place	Miles above U. S. engineer gage at Grafton, Ill.	[1]Elevation of low water of 1894	Elevation of high water of 1844
		Feet 1901	*Feet* 1902
Mouth of Jackson Creek	278.1	502.4	513.0
	279.0	502.5	514.8
Mouth of Cedar Creek	280.5	512.1	517.2
Brandon Wagon bridge	285.8	513.0	521.2
Foot of Dam No. 1, Joliet	288.7	535.0	540.0
Head of Dam No. 1, Joliet	288.7	546.8	550.6

* Caused by ice gorges.

[1] Elevations are referred to the Memphis datum which is approximately 6.8 feet below mean sea level. Taken from the report upon a survey made in 1902–5, for a fourteen foot waterway from Lockport, Ill., to the mouth of the Illinois River by the United States Army Engineers. House Document 263, 59th Congress 1st Session.

DISTANCES AND ELEVATIONS ALONG THE KASKASKIA RIVER

Place	Miles above mouth	Elevation of low water above sea level	Elevation of high water above sea level
		Feet	*Feet*
Mouth	0.0	344.2	.....
M. and O. Railroad bridge	17	355.0	.....
New Athens	34	360.0	393.0
Mouth of Big Muddy Creek	40	362.0	400.0
Fayette	42	363.0	398.0
Mouth of Elkhorn Creek	51	370.0	.....
Covington bridge	69	395.0	.....
Carlyle	84	408.0	434.0
Keyesport	97	419.0	441.0
Vandalia	121	452.0	479.0
New bridge	134	477.0	.....
Louden bridge	144	493.0	.....
Cowden bridge	148	500.0	514.0

NOTE—From a profile accompanying the Report on Kaskaskia River Improvement to the Rivers and Lakes Commission of Illinois, by Jacob A. Harman, 1910–11.

DISTANCES AND ELEVATIONS ALONG THE LITTLE WABASH RIVER

Place	Miles above mouth	Sea level elevation, low water	Elevation, high water marks
		Feet	*Feet*
Gaging station at Carmi (starting point of survey)	28.0	350.6	.....
Foot of old dam at Carmi	28.8	350.7	.....
Mouth of Skillet Fork River	32.7	350.7	.....
Foot of Hanks Shoals	45.4	350.7	384.0
Head of Hanks Shoals	46.4	353.0	384.3
Foot of Heights Shoals	49.6	353.4	385.0
Head of Heights Shoals	50.4	356.0	385.3
Green Shoals	62.0	356.4	387.2
	65.9	357.5	388.0
Golden Gate gaging station	72.7	361.5	389.0
Burkett Shoals	73.4	361.8	389.4
Massillon, foot of shoals	83.1	368.4	391.6
Massillon, head of shoals	84.6	371.0	392.0
Foot of shoals	86.7	371.4	392.4
Head of shoals	88.9	375.6	393.0
	95.2	376.3	395.2
Blood	96.6	377.6	397.2

DISTANCES AND ELEVATIONS ALONG THE LITTLE WABASH RIVER—*Concluded*

Place	Miles above mouth	Sea level elevation, low water	Elevation high water marks
		Feet	*Feet*
	105.6	387.6	405.6
Foot of shoals	113.6	393.5	414.0
Head of shoals	114.0	395.2	414.4
Mouth of Big Muddy Creek	117.3	396.5	417.9
Clay City gaging station	123.5	408.4	423.8
	123.8	410.4	425.2
Foot of shoals	125.0	410.6	427.7
Head of shoals	126.0	413.4	429.6
	130.8	417.4	439.3
Foot of shoals	137.6	426.4	451.0
Head of shoals	138.4	430.4	452.0
Louisville	138.9	430.8	452.7
	142.0	432.4	455.2

NOTE—From a profile of the Little Wabash River Survey made by the United States Department of Agriculture, Office of Experiment Stations, in 1908. Distances on above profile are given above highway bridge at Carmi. Distance of this starting point above mouth of river was scaled from topographic sheets.

DISTANCES AND ELEVATIONS OF THE MISSISSIPPI RIVER ALONG THE STATE OF ILLINOIS

Place	Miles above mouth of Ohio River	Elevation of low water
		Feet
Dubuque, Iowa	601	592.5
Mouth of Fever River	584	583.3
Mouth of Mosquito River	570	583.1
Clinton, Iowa	539	573.3
Mouth of Wapsipinicon River	528	571.5
Head of Rock Island Rapids at Leclaire, Iowa	518	570.0
Foot of Rock Island Rapids at Rock Island	503	549.3
Mouth of Rock River	501	547.9
Muscatine, Iowa	476	538.2
Mouth of Iowa River	447	531.3
Mouth of Henderson River	430	521.8
Burlington, Iowa	424	518.1
Mouth of Skunk River	416	516.2
Head of DesMoines Rapids at Montrose, Iowa	394	507.3
Foot of DesMoines Rapids at Keokuk, Iowa	382	484.7
Mouth of DesMoines River	380	482.2
Mouth of Fox River	372	481.9
Mouth of Wyanconda River	355	471.9
Quincy	344	465.8
Mouth of Fabius River	341	461.7
Hannibal, Mo	326	456.3
Mouth of Salt River	300	444.4
Falmouth, Mo	269	432.6
Mouth of Cuivre River	248	420.5
Mouth of Illinois River	232	411.0
Mouth of Missouri River	198	401.6
Gage at Chain of Rocks, Mo	193	397.0
Gage at St. Louis, Mo	182	387.0
Gage at Jefferson Barracks, Mo	172	384.0
Gage at Waters Point, Mo	160	379.0
Gage at Cornice Rock, Mo	149	372.0
Gage at Brickleys Mill, Mo	137	365.0
Gage at Little Rock Landing, Mo	126	359.0
Mouth of Kaskaskia River	118	351.0
Gage at East Kaskaskia	116	349.0
Gage at Chester	109	348.0
Gage at Bishops Landing, Mo	100	342.0
Gage at Red Rock, Mo	93	338.0
Gage at Grand Tower	79	332.0
Mouth of Big Muddy River	76	331.0
Mouth of Apple Creek	75	330.0
Gage at Moccasin Springs, Mo	66	324.0
Gage at Cape Girardeau, Mo	52	315.0

DISTANCES AND ELEVATIONS OF THE MISSISSIPPI RIVER ALONG THE STATE OF ILLINOIS—*Concluded*

Place	Miles above mouth of Ohio River	Elevation of low water
		Feet
Gage at Grays Point, Mo	45	312.0
Gage at Commerce, Mo	39	311.0
Gage at Hacker Towhead	26	304.0
Gage at Thompsons Landing, Mo	19	297.0
Gage at Beech Ridge	13	291.0
Gage at Birds Point, Mo	2	281.0
Mouth of Ohio River	0	280.0

NOTE—The portion of the table below St. Louis, was made up from data taken from a Report on the Survey of Mississippi River for a fourteen foot Waterway, House Document 50, 61st Congress, 1st Session. The portion above St. Louis was taken from data furnished by United States engineers.

Elevations are given in feet above Memphis datum, which is approximately 6.8 feet below mean sea level.

DISTANCES AND ELEVATIONS OF OHIO RIVER ALONG THE STATE OF ILLINOIS

Place	Miles above Cairo	High water elevation, feet above sea level	Low water elevation, feet above sea level
Mouth of Wabash River	126.3	.....	313.6
Shawneetown	117.8	366.1	309.5
Caseyville, Ky	105.0	.....	306.8
Cave-in-Rock	95.3	.....	302.4
Elizabethton	87.1	.....	298.2
Golconda	74.5	.....	297.2
Bay City	66.3	.....	293.5
Paducah, Ky	42.7	340.5	286.4
Hillerman's Landing	24.3	.....	281.6
New Caledonia	12.6	.....	275.8
Mound City	5.1	.....	273.7
Cairo	.....	335.9	273.2

DISTANCES AND ELEVATIONS ALONG THE SKILLET FORK RIVER

Place	Miles above mouth	Sea level elevation low water	Elevation high water marks
		Feet	*Feet*
Mouth	0.0	350.5	380.0
Frazer bridge	12.9	351.0	381.4
Mills Shoals gaging station	24.8	353.8	382.3
Foot of dam	26.9	358.0	382.5
Head of dam	26.9	364.1	382.5
Mouth of Haw Creek	29.6	364.1	382.6
.....	35.6	364.1	383.0
Wayne City gaging station	54.5	384.4	404.5
Foot of shoals	64.0	395.6	416.8
Head of shoals	66.2	402.0	420.5
.....	75.0	414.5	436.4
.....	84.0	436.4	454.2
Baltimore and Ohio Southwestern R. R. bridge	90.5	446.0	465.2

NOTE—From a profile of the Skillet Fork River made by the United State Department of Agriculture, office of experiment stations, in 1908.

DISTANCES AND ELEVATIONS ALONG THE SPOON RIVER

Place	Miles above mouth	Sea level elevation low water	Elevation high water marks
		Feet	*Feet*
Chicago, Burlington and Quincy R. R. bridge	2.3	437.6	.....
Sharp Bend	7.1	438.4	.....
Duncan's Mills bridge	13.5	440.5	456.9
Chicago, Burlington and Quincy R. R. bridge	16.8	446.1	.....
Seville bridge	21.3	450.8	.....
Bernadotte Dam, foot of dam	27.8	458.9	.....
Bernadotte Dam, head of dam	27.8	465.8	477.2
Tarter Ferry bridge	31.7	467.0	.....
Old ferry West of Seville	36.0	470.0	491.0
Seville bridge	38.0	472.6	.....
Buckeye bridge	42.6	478.5	.....
Ziltz bridge	36.8	484.7	.....
Babylon bridge	50.9	489.1	.....
Ellisville bridge	55.8	497.3	522.3
Indian Ford bridge	65.0	509.9	.....
London Mills	67.2	514.0	.....
Bridge North of London Mills	71.1	519.8	.....

NOTE—From a profile made by the Topographic Branch of the United States Geological Survey in 1911.

PART V

UNDEVELOPED WATER POWER

Any estimate of the amount of undeveloped water power in Illinois can be only an approximation on account of insufficient runoff data for those streams on which water power is available and because of the lack of accurate profiles showing the fall of the various streams.

METHOD OF DETERMINATION

The undeveloped water power in Illinois is practically all located on the following streams: Rock River, Fox, Kankakee, Illinois, Desplaines below the entrance of the Chicago Drainage Canal, the Chicago Drainage Canal, and a few tributaries of the above streams. The streams in the central and southern parts of the State and the other tributaries of the Illinois River have no water power possibilities worthy of consideration.

The fall on the above named streams was taken from the accompanying profiles or from the best source at hand where profiles were not available.

The stream flow, in second-feet per square mile, was determined from the accompanying records as far as available. Where the runoff data permitted, the flow used was obtained by taking the mean of the lowest two consecutive seven-day periods in each year. The natural flow of the Desplaines and Illinois rivers was determined and increased by 10,000 cubic feet per second, the amount of the flow in the Chicago Drainage Canal as allowed by law. The natural flow in the Illinois was taken from Water Supply Paper 194, p. 159, the "low" value being used.

The rivers were divided into sections and the area above the upper and lower limits of each section determined and the mean taken as the area for the section. This area multiplied by the flow per square mile gives the discharge, which, with the fall, gives the theoretical horsepower. The figures in the table are based on an efficiency of 80 per cent for the water wheels.

The amount of developed power in the summary is that determined by the investigations of the Rivers and Lakes Commission during 1911 and 1912. See the table of developed water power on page 370.

SUMMARY OF UNDEVELOPED WATER POWER

The following tabulation shows the theoretical horsepower, developed horsepower, and undeveloped horsepower for the streams on which are located practically all the water powers of the State.

WATERPOWER OF PRINCIPAL WATERPOWER STREAMS OF ILLINOIS

Stream	Theoretical horsepower[1]	Developed horsepower	Undeveloped horsepower
Rock River and major tributaries	25,860	11,390	14,470
Illinois River, major tributaries and Chicago Dr. Canal	144,200	47,600	96,600
Mississippi River at Rock Island	.....	6,240	.....
Minor tributaries of Mississippi River	.....	290	.....
Vermilion River (Wabash D.)	.....	16	.....
Total	.....	65,536	.....

[1] Based on wheels of 80 per cent efficiency.

PART VI

STORAGE

By storage is meant storage for the purpose of controlling floods and regulating the flow of streams for water power purposes. The topography of Illinois is not adapted to the building of storage reservoirs of sufficient size for regulating the flow of streams of any size. The high value of land for farming purposes would prohibit the construction of storage reservoirs even where natural conditions are favorable for their construction. A large amount of construction work is being done throughout the State to prevent the streams from overflowing into the natural basins along the streams and to drain the swamps which act as natural reservoirs in reducing the height of floods.

It may therefore be stated that there are no opportunities for building storage reservoirs in the State of Illinois for the purpose of controlling floods or regulating the flow of streams.

PART VII

GAZETTEER AND DRAINAGE AREAS OF ILLINOIS STREAMS

GAZETTEER

There are nearly five hundred streams included in this gazetteer, the location of which was taken from the following maps: Base Map of Illinois, 1909-1910, scale 1″ equals 7.9 miles; Provisional Geologic Map of Illinois, 1906, scale 1″ equals 12 miles; Post Route Map, scale 1″ equals 7.5 miles; Land Office Map, scale 1″ equals 14 miles, and the United States Geological Survey Topographic Sheets, scale 1″ equals 1 mile, very nearly. The length of each stream as given in the gazetteer was obtained by measurement on the maps and is only given for comparative purposes, as the map measurement may be 50 to 100 per cent, depending upon the scale of the map, shorter than the true length. The drainage area of each stream above its mouth is given.

The various forks or branches of different streams are described under the main stream and cross-referenced under the name of the fork or branch. For instance, South Fork of Sangamon River is described under Sangamon River (South Fork of), cross-referenced thus, "South Fork, see Sangamon River."

DRAINAGE AREAS

Following the gazetteer there is a table giving the drainage areas of nearly all those streams included in the gazetteer; the drainage areas of some of the very small streams listed in the gazetteer were not measured. The total area of the State of Illinois, exclusive of Lake Michigan, is 56,272 square miles; of this area, 44,050 square miles is tributary to the Mississippi, 11,500 to the Ohio River, and 722 square miles to Lake Michigan, or, in percentage, 78.3, 20.4, and 1.3, respectively. These values do not take into account changing the flow of the Chicago River from Lake Michigan to Mississippi River drainage, but represent the drainage areas as they existed prior to the opening of the Chicago Drainage Canal. With the completion of works under construction by the Sanitary District of Chicago practically all of the Lake Michigan drainage in Illinois will be diverted into the Mississippi River drainage basin.

The names of the streams are arranged from the sources down. For example, Sinsinnewa River is the most northern tributary of the Mississippi River in Illinois, Galena is the next one below, and so on. Following the area of a stream at the mouth and at other points, its tributaries are listed beginning at the sources; each tributary of a

tributary is treated in the same way. Tributaries being indented as shown in the table. For example, Otter Creek is a tributary of Sugar River which is a tributary of Pecatonica River which is tributary to Rock River which is tributary to Mississippi River.

While the table of drainage areas is a duplication to some extent of the data given in the gazetteer, it is thought that the arrangement of the tributaries presents a more or less graphical representation of the different drainage systems, which will be found of considerable use in any study of Illinois streams.

The drainage areas were measured on the following maps, the designating symbol as used in the table is given after each map: Base Map of Illinois, B.; Post Route Map, P.R.; Provisional Geologic Map of Illinois, 1906, G.; and the United States Geological Survey Topographic Sheets, T.S.

GAZETTEER OF ILLINOIS STREAMS

Allforks Creek rises in T. 32 N., R. 1 W., Putnam County; flows west and north into Illinois River in Sec. 19, T. 33 N., R. 1 W., same county; length about 10 miles; drainage area 27 square miles. (Mississippi River Drainage.)

Apple River rises in T. 29 N., R. 3 E., JoDaviess County; flows southerly into Mississippi River in T. 25 N., R. 3 E., Carroll County; length about 44 miles; drainage area 270 square miles. (Mississippi River Drainage.)

Apple Creek rises in T. 14 N., R. 8 W., Morgan County; flows southwesterly through Green County into Illinois River in Sec. 36, T. 11 N., R. 14 W., Greene County; length about 53 miles. Principal tributaries are Wolf Run, Coal Creek and Bear Creek; drainage area 435 square miles. (Mississippi River Drainage.)

Apple Creek rises in T. 13 N., R. 8 E., Coles County; flows westerly into Kaskaskia River in T. 13 N., R. 5 E., Moultrie County; length about 15 miles; drainage area 57 square miles. (Mississippi River Drainage.)

Armstrong rises in T. 32 N., R. 5 E., LaSalle County; flows north into Illinois River in Sec. 30, T. 33 N., R. 6 E., Grundy County; length about 6 miles. (Mississippi River Drainage.)

Au Sable Creek has its source in the East Fork which rises in T. 37 N., R. 8 E., Kendall County; flows southerly into Illinois River in Sec. 32, T. 34 N., R. 8 E., Grundy County; length about 24½ miles; drainage area 233 square miles. (Mississippi River Drainage.)

Au Sable Creek (East Fork) rises in T. 37 N., R. 8 E., Kendall County; flows southerly to unite with the West Fork in T. 35 N., R. 8 E., same county; length about 11 miles; drainage area 56 square miles. (Mississippi River Drainage.)

Au Sable Creek (Middle Fork) rises in T. 36 N., R. 7 E., Kendall County; flows southeast into the West Fork in T. 35 N., R. 8 E., same county; length about 12 miles; drainage area 38 square miles. (Mississippi River Drainage.)

Au Sable Creek (West Fork) rises in T. 35 N., R. 6 E., Kendall County; flows east and unites with the East Fork in T. 35 N., R. 8 E., same county; length about 13 miles; drainage area 37 square miles. (Mississippi River Drainage.)

Babb Creek rises in T. 29 N., R. 2 W., Marshall County; flows west into Illinois River in T. 29 N., R. 3 W., same county; length about 8½ miles; drainage area 9 square miles. (Mississippi River Drainage.)

Bankstone Creek rises in T. 9 S., R. 4 E., Williamson County; flows easterly into Middle Fork of Saline River in T. 9 S., R. 6 E., Saline County; length about 17 miles; drainage area 88 square miles. (Ohio River Drainage.)

Bay Creek rises in T. 4 S., R. 4 W., Pike County; flows southerly into Mississippi River in T. 7 S., R. 4 W., same county; length about 22 miles; drainage area 222 square miles. (Mississippi River Drainage.)

Bear Creek rises in T. 3 N., R. 6 W., Hancock County; flows southwesterly into Mississippi River in T. 2 N., R. 9 W., Edwards County; length about 48 miles; drainage area 345 square miles. (Mississippi River Drainage.)

Bear Creek (South Fork) rises in T. 1 N., R. 5 W., Adams County; flows northwesterly into Bear Creek in T. 2 N., R. 8 W., same county; length about 22½ miles; drainage area 144 square miles. (Mississippi River Drainage.)

Bear Creek (Hog Branch) rises in T. 1 S., R. 7 W., Adams County; flows north into South Fork of Bear Creek in T. 1 N., R. 7 W., same county; length about 15 miles; drainage area 29 square miles. (Mississippi River Drainage.)

Bear Creek rises in T. 11 N., R. 4 W., Christian County; flows northeast into the South Fork of Sangamon River in T. 13 N., R. 3 W., same county; length about 12½ miles; drainage area 59 square miles. (Mississippi River Drainage.)

Bear Creek rises in T. 11 N., R. 10 W., Greene County; flows westerly into Apple Creek in T. 11 N., R. 11 W., same county; length about 10 miles; drainage area 30 square miles. (Mississippi River Drainage.)

Bear Creek rises in T. 5 N., R. 3 E., Fayette County; flows southwesterly across the northwest corner of Marion County into East Fork of Kaskaskia River in T. 3 N., R. 1 W., Fayette County; length about 23 miles; drainage area 99 square miles. (Mississippi River Drainage.)

Bear Creek rises in T. 5 S., R. 8 E., White County; flows southerly into the North Fork of Saline River in T. 8 S., R. 8 E., Gallatin County; length about 16½ miles; drainage area 132 square miles. (Ohio River Drainage.)

Beaucoup Creek rises in T. 3 S., R. 3 W., Washington County; flows southerly across Washington, Perry and Jackson counties into Big Muddy River in T. 8 S., R. 2 W., Jackson County; length about 46 miles; drainage area 564 square miles. (Mississippi River Drainage.)

Beaver Creek rises in T. 46 N., R. 4 E., Boone County; flows southwesterly into Kishwaukee River in T. 44 N., R. 4 E., same county; length about 22 miles; drainage area 64 square miles. (Mississippi River Drainage.)

Beaver Creek rises in T. 29 N., R. 9 W., Newton County, Ind.; flows westerly into Iroquois River in T. 29 N., R. 13 E., Iroquois County, Ill.; length about 23 miles; drainage area 179 square miles. (Mississippi River Drainage.)

Beaver Creek rises in T. 5 N., R. 3 W., Bond County; flows southerly across a portion of Bond and Clinton counties into Shoal Creek in T. 1 N., R. 4 W., Clinton County; length about 28 miles; drainage area 162 square miles. (Mississippi River Drainage.)

Beaver Creek (Flat Branch) rises in T. 4 N., R. 2 W., Bond County; flows southerly into Beaver Creek in T. 3 N., R. 3 W., Clinton County; length about 11½ miles; drainage area 24 square miles. (Mississippi River Drainage.)

Beck's Creek rises in T. 12 N., R. 1 E., near the eastern boundary of Christian County; flows southerly along this boundary and across the southwestern boundary of Shelby County into Mitchell Creek in T. 8 N., R. 2 E., Fayette County; length about 26 miles; drainage area 132 square miles. (Mississippi River Drainage.)

Big Creek rises in T. 8 N., R. 4 E., Fulton County; flows southwesterly into Spoon River in T. 5 N., R. 2 E., same county; length about 11½ miles; drainage area 30 square miles. (Mississippi River Drainage.)

Big Creek rises in T. 8 N., R. 4 E., Effingham County; flows westerly into Kaskaskia River in T. 8 N., R. 2 E., Fayette County; length about 16½ miles; drainage area 79 square miles. (Mississippi River Drainage.)

Big Creek rises in T. 13 N., R. 13 W., Edgar County; flows southeasterly into Wabash River in T. 10 N., R. 11 W., Clark County; length about 24½ miles; drainage area 111 square miles. (Ohio River Drainage.)

Big Creek rises in T. 8 N., R. 12 W., Crawford County; flows southerly into Embarras River in T. 5 N., R. 13 W., same county; length about 17 miles; drainage area 110 square miles. (Ohio River Drainage.)

Big Creek rises in T. 7 N., R. 4 E., Effingham County; flows easterly into Little Wabash River in T. 7 N., R. 5 E., same county; length about 11 miles; drainage area 29 square miles. (Ohio River Drainage.)

Big Creek rises in T. 11 S., R. 9 E., Hardin County; flows southerly into Ohio River in T. 12 S., R. 8 E., same county; length about 14 miles; drainage area 47 square miles. (Ohio River Drainage.)

Big Creek (Hog Thief Branch) rises in T. 11 S., R. 9 E., Hardin County; flows southwest into Big Creek in T. 12 S., R. 9 E., same county; length about 6 miles. (Ohio River Drainage.)

Big Creek rises in T. 12 S., R. 1 W., Union County; flows southerly into Cache River in T. 14 S., R. 1 E., Pulaski County; length about 17 miles; drainage area 41 square miles. (Ohio River Drainage.)

Big Apple Creek rises in T. 13 N., R. 8 W., Sangamon County; flows southwesterly into Apple Creek in T. 13 N., R. 9 W., Morgan County; length about 9 miles; drainage area 28 square miles. (Mississippi River Drainage.)

Big Bay Creek rises in T. 11 S., R. 4 E., Johnson County; flows southeasterly into Ohio River in T. 14 S., R. 6 E., Pope County; length about 27 miles; drainage area 275 square miles. (Ohio River Drainage.)

Big Blue River rises in T. 4 S., R. 3 W., Pike County; flows south and east into Illinois River in Sec. 4, T. 5 S., R. 2 W., same county; length about 13 miles; drainage area 50 square miles. (Mississippi River Drainage.)

Big Bureau Creek rises in T. 37 N., R. 2 E., Lee County; flows southwest to Bureau County, thence southeast to Illinois River in Sec. 16, T. 15 N., R. 10 E., Bureau County; length about 60 miles; drainage area 502 square miles. (Mississippi River Drainage.)

Big Cypress Creek rises in T. 12 S., R. 1 W., Union County; flows southeasterly into Cache River in T. 12 S., R. 2 E., Johnson County; length about 21 miles; drainage area 65 square miles. (Ohio River Drainage.)

Big Indian Creek rises in T. 37 N., R. 3 E., DeKalb County; flows southward into Fox River in T. 34 N., R. 4 E., LaSalle County; length about 39 miles; drainage area 277 square miles. (Mississippi River Drainage.)

Big Muddy River rises in T. 1 N., R. 2 E., Marion County; flows south across Jefferson County to the southwestern part of Franklin County, thence turns southwesterly into Mississippi River at the southwest corner of Jackson County; length about 94 miles. Principal tributaries are Rayse Creek, Casey Fork, Middle Fork, Ewing Creek, Pond Creek, Little Muddy River, Reese, Beaucoup, Galum, Kinkaid and Cedar creeks; drainage area 2,390 square miles. (Mississippi River Drainage.)

Big Muddy River (Casey Fork) rises in T. 1 S., R. 3 E., Jefferson County; flows southerly across Jefferson County into Big Muddy River in T. 5 S., R. 2 E., Franklin County; length about 29 miles; drainage area 160 square miles. (Mississippi River Drainage.)

Big Muddy River (Middle Fork) rises in T. 4 S., R. 5 E., Hamilton County; flows southwesterly across Franklin County into Big Muddy River in T. 7 S., R. 2 E., same county; length about 26 miles; drainage area 217 square miles. (Mississippi River Drainage.)

Big Neck Creek rises in T. 2 N., R. 6 W., Adams County; flows westerly into South Fork of Bear Creek in T. 2 N., R. 7 W., same county; length about 8 miles; drainage area 29 square miles. (Mississippi River Drainage.)

Big Rock Creek (see Rock Creek).

Big Sandy Creek rises in T. 13 N., R. 9 W., Morgan County; flows southwest into Illinois River in Sec. 17, T. 13 N., R. 13 W., Scott County; length about 29 miles; drainage area 254 square miles. (Mississippi River Drainage.)

Bill's Run rises in T. 32 N., R. 6 E., Grundy County; flows northeasterly into Illinois River in Sec. 12, T. 33 N., R. 6 E., same county; length about 11 miles; drainage area 35 square miles. (Mississippi River Drainage.)

Bishop Creek rises in T. 7 N., R. 7 E., Effingham County; flows southwesterly into Little Wabash River in T. 6 N., R. 6 E., same county; length about 17 miles; drainage area 67 square miles. (Ohio River Drainage.)

Blackberry Creek rises in T. 39 N., R. 7 E., Kane County; flows south into Fox River in T. 37 N., R. 7 E., Kendall County, at Yorkville; length about 18 miles; drainage area 65 square miles. (Mississippi River Drainage.)

Black Partridge (or Partridge) Creek rises in T. 27 N., R. 2 W., Woodford County; flows west into Illinois River in Sec. 30, T. 28 N., R. 3 W., same county; length about 12 miles; drainage area 29 square miles. (Mississippi River Drainage.)

Black Walnut Creek rises in T. 33 N., R. 13 E., Will County; flows southwest into Rock Creek in T. 32 N., R. 11 E., same county; length about 19 miles; drainage area 58 square miles. (Mississippi River Drainage.)

Bon Pas Creek rises in T. 4 N., R. 14 W., Richland County; flows southerly across Richland and Edwards counties into Wabash River in T. 3 S., R. 14 W., Wabash County; length about 42 miles. Principal tributary is Little Bon Pas Creek; drainage area 258 square miles. (Ohio River Drainage.)

Booz Creek rises in T. 11 N., R. 1 W., near the southern boundary of Christian County; flows southerly across the eastern portion of Montgomery County, thence southeasterly into Kaskaskia River in T. 7 N., R .1 E., Fayette County; length about 24½ miles; drainage area 115 square miles. (Mississippi River Drainage.)

Brewster's Sluice rises in T. 29 N., R. 7 E., Livingston County; flows northerly into West Fork of Mazon River in T. 31 N., R. 7 E., Grundy County; length about 23 miles; drainage area 52 square miles. (Mississippi River Drainage.)

Brown Creek rises in T. 4. N., R. 6 W., Hancock County; flows easterly into Crooked Creek in T. 4 N., R. 4 W., McDonough County; length about 14 miles; drainage area 57 square miles. (Mississippi River Drainage.)

Bruellett's Creek rises in T. 15 N., R. 13 W., Edgar County, Illinois; flows southeasterly into Wabash River in T. 13 N., R. 9 W., Vigo County, Indiana; length about 40 miles; drainage area 302 square miles. (Ohio River Drainage.)

Bruellett's Creek (North Fork) rises in T. 16 N., R. 13 W., Edgar County; flows southeasterly into Bruelette's Creek in T. 15 N., R. 10 W., same county; length about 20 miles; drainage area 104 square miles. (Ohio River Drainage.)

Brush Creek rises in T. 17 N., R. 11 E., Bureau County; flows southwest into East Bureau Creek in T. 16 N., R. 10 E., same county; length about 16 miles; drainage area 40 square miles. (Mississippi River Drainage.)

Brush Creek rises in T. 10 N., R. 5 E., Shelby County; flows southwesterly into Richland Creek in same county; length about 11 miles; drainage area 26 square miles. (Mississippi River Drainage.)

Brush Creek rises in T. 13 N., R. 13 E., Edgar County; flows west into Embarras River in T. 13 N., R. 10 E., Coles County; length about 20 miles; drainage area 82 square miles. (Ohio River Drainage.)

Brush Creek rises in T. 3 N., R. 5 E., Clay County; flows southerly into Skillet Fork in T. 1 S., R. 5 E., Wayne County; length about 24 miles; drainage area 51 square miles. (Ohio River Drainage.)

Brushy Creek rises in Sec. 33, T. 8 S., R. 4 E., Williamson County; flows easterly into Bankstone Creek in Sec. 12, T. 9 S., R. 5 E., Saline County; length about 11½ miles; drainage area 22 square miles. (Ohio River Drainage.)

Brushy Fork (see Embarras River).

Buck Creek rises in T. 4 N., R. 6 E., Clay County; flows easterly into Little Wabash River in T. 3 N., R. 7 E., same county; length about 11½ miles; drainage area 26 square miles. (Ohio River Drainage.)

Buck Creek rises in T. 25 N., R. 3 E., LaSalle County; flows easterly into Fox River at Weldron; length about 13 miles; drainage area 43 square miles. (Mississippi River Drainage.)

Buckhart Creek rises in T. 14 N., R. 1 W., Christian County; flows northwesterly into Sangamon River in T. 15 N., R. 3 W., Sangamon County; length about 23 miles; drainage area 105 square miles. (Mississippi River Drainage.)

Buffalo Creek rises in T. 37 N., R. 10 E., Will County; flows southerly into DuPage River in T. 36 N., R. 9 E., same county; length about 18 miles; drainage area 39 square miles. (Mississippi River Drainage.)

Butterfield Creek rises in Sec. 16, T. 36 N., R. 13 E., Cook County; flows northeasterly into Thorn Creek in Sec. 4, T. 35 N., R. 14 E., same county; length about 9 miles. (Lake Michigan Drainage.)

Cache River rises in T. 11 N., R. 1 W., Union County; flows southerly across Union County into Ohio River in T. 16 S., R. 1 W.; length about 73 miles. Principal tributaries are East Branch, Big Cypress Creek, Big Creek and Mill Creek; drainage area 623 square miles. (Ohio River Drainage.)

Cache River (East Branch) rises in T. 12 S., R. 3 E., Johnson County; flows southerly into Cache River in T. 13 S., R. 13 E., same county; length about 19 miles; drainage area 94 square miles. (Ohio River Drainage.)

Cahokia Creek rises in T. 8 N., R. 5 W., Montgomery County; flows southwesterly across the southeast corner of Macoupin County and the northwest corner of Madison County through East St. Louis into Mississippi River; length about 56 miles; drainage area 360 square miles. Principal tributaries are Sweet Creek, Indian Creek and Canteen Creek. (Mississippi River Drainage.)

Camp Creek rises in T. 15 N., R. 2 W., Mercer County; flows southwesterly into Edwards River in T. 14 N., R. 4 W., same county; length about 21 miles; drainage area 58 square miles. (Mississippi River Drainage.)

Camp Creek rises in T. 7 N., R. 7 W., Hancock County; flows northerly into Mississippi River in T. 8 N., R. 7 W., Henderson County; length about 12 miles; drainage area 35 square miles. (Mississippi River Drainage.)

Camp Creek rises in T. 20 N., R. 8 E., Champaign County; flows southwesterly into Sangamon River in T. 18 N., R. 5 E., Piatt County; length about 15 miles; drainage area 43 square miles. (Mississippi River Drainage.)

Camp Creek rises in T. 5 N., R. 1 W., McDonough County; flows southwesterly into Crooked Creek in T. 3 N., R. 4 W., Schuyler County; length about 24 miles; drainage area 126 square miles. (Mississippi River Drainage.)

Camp Creek rises in T. 7 N., R. 3 E., Fayette County; flows westerly into Kaskaskia River in T. 7 N., R. 1 E., same county; length about 12 miles; drainage area 23 square miles. (Mississippi River Drainage.)

Camp Run rises in T. 15 N., R. 3 E., Henry County; flows westerly into Edwards River in T. 15 N., R. 1 W., Mercer County; length about 20 miles; drainage area 50 square miles. (Mississippi River Drainage.)

Cane Creek rises in Sec. 29, T. 6 S., R. 9 E., White County; flows southwesterly into Bear Creek in Sec. 33, T. 7 S., R. 8 E., Gallatin County; length about 11½ miles; drainage area 59 square miles. (Ohio River Drainage.)

Canteen Creek rises in Sec. 1, T. 3 N., R. 8 W., Madison County; flows westerly through Madison County into Cahokia Creek near the southern boundary; length about 12½ miles. (Mississippi River Drainage.)

Carroll Creek rises in T. 24 N., R. 7 E., Carroll County; flows westerly into Plum River in T. 25 N., R. 4 E., same county; length about 25 miles; drainage area 55 square miles. (Mississippi River Drainage.)

Casey Fork (see Big Muddy River).

Cedar Creek rises in T. 11 N., R. 1 E.. Knox County; flows northwesterly into Henderson River in T. 12 N., R. 4 W., Henderson County; length about 30 miles; drainage area 163 square miles. (Mississippi River Drainage.)

Cedar Creek rises in T. 34 N., R. 10 E., Will County; flows west into Desplaines River in T. 34 N., R. 9 E., same county; length about 6 miles; drainage area 12 square miles. (Mississippi River Drainage.)

Cedar Creek rises in T. 9 N., R. 3 W., Warren County; flows easterly through Warren and Fulton counties into Spoon River in T. 8 N., R. 2 E., Fulton County; length about 34 miles; drainage area 296 square miles. (Mississippi River Drainage.)

Cedar Creek rises in T. 6 N., R. 4 W., McDonough County; flows southwesterly into Crooked Creek in T. 5 N., R. 5 W., Hancock County; length about 13 miles; drainage area 31 square miles. (Mississippi River Drainage.)

Cedar Creek rises in T. 10 S., R. 2 W., Jackson County; flows westerly into Big Muddy River in T. 10 S., R. 3 W., same county; length about 11 miles; drainage area 44 square miles. (Mississippi River Drainage.)

Chicago River. In its original state had two branches, the North Branch rising in Sec. 13, T. 43 N., R. 11 E., Lake County; and the South Branch, rising at Kenzie and Thirty-first Streets, Chicago; these branches unite to form the main stem of the Chicago River which flowed into Lake Michigan; length of North Branch 29 miles; original length of South Branch 6¼ miles; length of main stream 1¼ miles. By the construction of the Chicago Drainage Canal the flow in the South Branch and main stem has been reversed, the flow now being from Lake Michigan toward the Illinois River; drainage area (in natural state) 226 square miles. (Lake Michigan Drainage.)

Clancy Creek rises in T. 5 N., R. 8 W., Hancock County; flows westerly into Mississippi River in the same township; length about 8½ miles; drainage area 30 square miles. (Mississippi River Dranage.)

Claypool Creek rises in T. 32 N., R. 9 E., Kankakee County; flows westerly into Mazon River in T. 33 N., R. 8 E., Grundy County; length about 9 miles ;drainage area 39 square miles. (Mississippi River Drainage.)

Clear Creek rises in T. 11 S., R. 2 W., Union County; flows southwesterly into Mississippi River in T. 14 S., R. 3 W., Alexander County; length about 25 miles; drainage area 131 square miles. (Mississippi River Drainage.)

Clear Creek rises in T. 13 N., R. 11 W., Edgar County, Illinois; flows southeasterly into Wabash River in T. 11 N., R. 9 W., Vigo County, Indiana; length about 19 miles; drainage area 46 square miles. (Ohio River Drainage.)

Coal Creek rises in T. 15 N., R. 8 E., Bureau County; flows northwesterly into Hickory Creek in T. 17 N., R. 6 E., same county; length about 19 miles; drainage area 99 square miles. (Mississippi River Drainage.)

Coal Creek rises in T. 8 N., R. 4 E., Fulton County; flows westerly into Spoon River in T. 8 N., R. 2 E., same county; length about 14 miles; drainage area 48 square miles. (Mississippi River Drainage.)

Coal Creek rises in T. 13 N., R. 10 W., Greene County; flows southerly into Apple Creek in T. 12 N., R. 10 W., same county; length about 12 miles; drainage area 40 square miles. (Mississippi River Drainage.)

Coal Creek rises in T. 11 N., R. 1 E., Christian County; flows southeasterly into Opossum Creek in T. 10 N., R. 1 E., Shelby County; length about 9 miles; drainage area 17 square miles. (Mississippi River Drainage.)

Contrary Creek rises in T. 5 S., R. 5 E., Hamilton County; flows southeasterly into the North Fork of Saline River in T. 7 S., R. 7 E., same county; length about 13 miles; drainage area 61 square miles. (Ohio River Drainage.)

Coon Run rises in T. 15 N., R. 12 W., Morgan County; flows westerly into Illinois River in Sec. 1, T. 15 N., R. 14 W., Scott County; length about 16 miles; drainage area 45 square miles. (Mississippi River Drainage.)

Coon Creek rises in T. 1 N., R. 2 E., Marion County; flows westerly into Crooked Creek in T. 1 N., R. 1 E., same county; length about 14 miles; drainage area 36 square miles. (Mississippi River Drainage.)

Coon Creek rises in T. 41 N., R. 6 E., Kane County; flows northwesterly into Kishwaukee River in T. 44 N., R. 4 E., Boone County; length about 24 miles; drainage area 126 square miles. (Mississippi River Drainage.)

Copper Creek rises in T. 15 N., R. 3 W., Mercer County; flows west into Mississippi River in T. 16 N., R. 6 W., Rock County; length about 22 miles; drainage area 76 square miles. (Mississippi River Drainage.)

Copperas Creek rises in T. 8 N., R. 6 E., Peoria County; flows southerly into Illinois River in Sec. 13, T. 6 N., R. 5 E., Fulton County; length about 16½ miles; drainage area 42 square miles. (Mississippi River Drainage.)

Cottonwood Creek rises in T. 11 N., R. 9 E., Coles County; flows southerly across Cumberland County into Embarrass River in T. 9 N., R. 9 E., same county; length about 19 miles; drainage area 152 square miles. (Ohio River Drainage.)

Court Creek rises in T. 11 N., R. 2 E., Knox County, near Galesburg; flows easterly into Spoon River in T. 11 N., R. 3 E., same county; length

about 11 miles; drainage area 75 square miles. (Mississippi River Drainage.)

Covel Creek rises in T. 32 N., R. 5 E., LaSalle County; flows northwest into Illinois River in Sec. 21, T. 33 N., R. 3 E., same county; length about 16 miles; drainage area 62 square miles. (Mississippi River Drainage.)

Crab Orchard Creek rises in T. 8 S., R. 4 E., Williamson County; flows west into Big Muddy River in T. 8 S., R. 1 W., Jackson County; length about 35 miles; drainage area 372 square miles. (Mississippi River Drainage.)

Crane Creek rises in T. 21 N., R. 5 W., Mason County; flows southwesterly across Mason County into Sangamon River in T. 20 N., R. 8 W., same county; length about 19 miles; drainage area 121 square miles. (Mississippi River Drainage.)

Crawford Creek rises in Sec. 10, T. 8 S., R. 9 E., Gallatin County; flows southwesterly into North Fork of Saline River in Sec. 27, T. 8 S., R. 8 E., same county; length about 7¼ miles; drainage area 11 square miles. (Ohio River Drainage.)

Crooked Creek rises in T. 7 N., R. 4 W., McDonough County; flows southwesterly to the eastern part of Hancock County; thence southerly through Hancock and Schuyler counties into Illinois River in Sec. 9, T. 1 S., R. 1 W., at the boundary between Schuyler and Brown counties; length about 97 miles. Principal tributaries are LaHarpe Creek and Camp Creek; drainage area 1,350 square miles. (Mississippi River Drainage.)

Crooked Creek rises in T. 8 N., R. 10 E., Jasper County; flows southerly into Embarras River in T. 6 N., R. 10 E., same county; length about 12½ miles! drainage area 111 square miles. · (Ohio River Drainage.)

Crooked Creek rises in T. 3 N., R. 3 E., Marion County; flows southwesterly across Marion and Clinton counties, forming a portion of the boundary between Clinton and Washington counties, and empties into Kaskaskia River in T. 1 N., R. 2 W., at the boundary line; length about 42 miles. Principal tributary is Lost Creek; drainage area 473 square miles. (Mississippi River Drainage.)

Crooked Creek rises in T. 5 N., R. 4 E., Fayette County; flows southeasterly into Little Wabash River in T. 4 N., R. 6 E., Clay County; length about 14 miles; drainage area 36 square miles. (Ohio River Drainage.)

Crooked Creek (East Branch) rises in T. 8 N., R. 3 W., Warren County; flows south and southwest across McDonough County into Crooked Creek in T. 5 N., R. 5 W.; length about 39 miles; drainage area 139 square miles. (Mississippi River Drainage.)

Crow Creek rises in T. 13 N., R. 8 E., Stark County; flows eastward into Illinois River (west bank) in Sec. 6, T. 12 N., R. 10 E., Marshall County; length about 25 miles; drainage area 106 square miles. (Mississippi River Drainage.)

Crow Creek rises in T. 28 N., R. 1 E., Woodford County; flows westerly into Illinois River (east bank) in Sec. 33, T. 29 N., R. 3 W., Marshall County; length about 28 miles; drainage area 179 square miles. (Mississippi River Drainage.)

Crow Creek (South Branch) rises in T. 28 N., R. 1 E., Woodford County; flows northwest to unite with the North Branch in T. 28 N., R. 1 W., Marshall County; length about 16 miles; drainage area 73 square miles. (Mississippi River Drainage.)

Crow Creek (North Branch) rises in T. 29 N., R. 1 E., Marshall County; flows westerly to unite with the South Branch in T. 29 N., R. 1 W., same county; length about 14 miles; drainage area 43 square miles. (Mississippi River Drainage.)

Deer Creek rises in T. 20 N., R. 1 E., DeWitt County; flows southwesterly into Salt Creek in T. 19 N., R. 3 W., Logan County; length about 16½ miles; drainage area 78 square miles. (Mississippi River Drainage.)

Deer Creek rises in T. 1 N., R. 7 E., Wayne County; flows southeasterly into Elm Creek in T. 1 S., R. 8 E., Wayne County; length about 12 miles; drainage area 57 square miles. (Ohio River Drainage.)

Derry's Creek rises in T. 11 S., R. 1 W., Union County; flows northerly into Crab Orchard Creek in T. 9 S., R. 1 W., Jackson County; length about 16 miles; drainage area 61 square miles. (Mississippi River Drainage.)

Desplaines River rises in T. 3 N., R. 21 E., Racine County, Wisconsin; flows southerly to the state line, thence through Lake and Cook counties, Illinois, to the central part of Cook County, thence southwesterly across Cook and Will counties to the western boundary of Will County where it joins the Kankakee River to form the Illinois in T. 34 N., R. 8 E.; length 111 miles, of which 92 miles are in Illinois and 19 in Wisconsin; total drainage area 1,366 square miles of which 1,240 are in Illinois. Principal tributaries are: Salt Creek, Jackson Creek, and DuPage River. (Mississippi River Drainage.)

Dillon Creek rises in T. 25 N., R. 4 W., Tazewell County; flows southerly into Mackinaw River in T. 23 N., R. 4 W., same county; length about 14 miles; drainage area 36 square miles. (Mississippi River Drainage.)

Dismal Creek rises in T. 5 N., R. 3 E., Marion County; flows southeasterly into Little Wabash River in T. 4 N., R. 6 E., Clay County; length about 20 miles; drainage area 55 square miles. (Ohio River Drainage.)

Dogwood Creek rises in T. 8 N., R. 13 W., Crawford County; flows southwesterly into Big Creek in T. 6 N., R. 13 W., same county; length about 11 miles; drainage area 26 square miles. (Ohio River Drainage.)

Dorsey Branch (See Phill's Creek).

Dry Run rises in T. 1 N., R. 14 E., Rock County, Wis.; flows southwesterly into Rock River in T. 46 N., R. 1 E., Winnebago County, Ill.; length about 11 miles. (Mississippi River Drainage.)

Dry Fork (See Little Wabash River).

Dry Fork (See Shoal Creek).

Duck Creek rises in T. 13 N., R. 2 W., Mercer County; flows southwesterly into Middle Henderson Creek in T. 12 N., R. 3 W., Warren County; length about 12 miles; drainage area 18 square miles. (Mississippi River Drainage.)

DuPage River has its source in the West Fork, which rises in Sec. 30, T. 41 N., R. 10 E., Cook County; flows southerly through DuPage and Will counties into Desplaines River in Sec. 21, T. 34 N., R. 9 E., about four miles above its mouth; length about 74 miles; drainage area 326 square miles. (Mississippi River Drainage.)

DuPage River (East Fork) rises in Sec. 23, T. 40 N., R. 10 E., DuPage County; flows southerly to its junction with the West Fork in Sec. 7, T. 37 N., R. 10 E., same county; length about 27 miles; drainage area 84 square miles. (Mississippi River Drainage.)

DuPage River (West Fork) rises in Sec. 30, T. 41 N., R. 10 E., Cook County; flows southerly through DuPage County to its junction with East Fork in Sec. 7, T. 37 N., R. 10 E., DuPage County; length about 40 miles; drainage area 106 square miles. (Mississippi River Drainage.)

Dutchman's Creek rises in T. 11 S., R. 2 E., Johnson County; flows southerly into Cache River in T. 13 S., R. 2 E., same county; length about 12½ miles. (Ohio River Drainage.)

East Branch (see Cache River).

East Branch (see Crooked Creek).

East Branch (see Little Galum Creek).

East Branch (see Panther Creek).

East Branch (see Vermilion River).

East Fork (see Au Sable Creek).

East Fork (see DuPage Creek).

East Fork (see Kaskaskia River).

East Fork (see Mazon River).

East Fork (see Shoal Creek).

East Fork (see Spoon River).

East Bureau Creek rises in T. 17 N., R. 11 E., Bureau County; flows southerly into Big Bureau Creek in T. 15 N., R. 10 E., same county; length about 17 miles; drainage area 104 square miles. (Mississippi River Drainage.)

Edwards River rises in T. 14 N., R. 4 E., Henry County; flows westerly into Mississippi River in T. 14 N., R. 5 W., Mercer County; length about 67 miles; drainage area 446 square miles. (Mississippi River Drainage.)

Eliza Creek rises in T. 15 N., R. 8 W., Mercer County; flows southwesterly into Mississippi River in T. 14 N., R. 6 W., same county; length about 20 miles; drainage area 73 square miles. (Mississippi River Drainage.)

Elkhorn Creek rises in T. 25 N., R. 7 E., Ogle County; flows southerly through Whiteside County into Rock River in T. 21 N., R. 6 E., Whiteside County; length about 26 miles; drainage area 249 square miles. (Mississippi River Drainage.)

Elkhorn Creek rises in T. 3 S., R. 4 W., Washington County; flows northwesterly into Kaskaskia River in T. 1 S., R. 5 W., same county; length about 22 miles; drainage area 91 square miles. (Mississippi River Drainage.)

Ellison Creek rises in T. 8 N., R. 3 W., Warren County; flows northwesterly into Mississippi River in T. 9 N., R. 6 W., Henderson County; length about 26 miles; drainage area 112 square miles. (Mississippi River Drainage.)

Elm Creek rises in T. 3 N., R. 6 E., Clay County; flows southeasterly across Clay and Wayne counties into Little Wabash River in T. 1 S., R. 9 E., Wayne County; length about 36 miles; drainage area 281 square miles. (Ohio River Drainage.)

Embarrass River rises in T. 19 N., R. 9 E., Champaign County, near Urbana; flows southerly through Champaign, Douglas and Coles Counties to near the central part of Jasper County, thence southeasterly through Jasper, Crawford, and Lawrence Counties into the Wabash River in T. 3 N., R. 11 W., Lawrence County; length about 132 miles; drainage area 2,400 square miles. Principal tributaries are Scattering Fork, Brushy Fork, Brush, Cottonwood, Range, and Crooked Creeks, North Fork, Big Creek and Muddy Creek. (Ohio River Drainage.)

Embarrass River (Brushy Fork) rises in T. 15 N., R. 13 W., Edgar County; flows southwest into Embarrass River in T. 15 N., R. 10 E., Douglas County; length about 16½ miles; drainage area 120 square miles. (Ohio River Drainage.)

Embrarras River (North Fork) rises in T. 12 N., R. 13 W., Edgar County; flows southerly across Clark and Jasper Counties into Embarras River in T. 6 N., R. 14 W., Jasper County; length about 47 miles; drainage area 320 square miles. Principally tributary is Willow Creek. (Ohio River Drainage.)

Embarras River (Scattering Fork) rises in T. 17 N., R. 8 E., Champaign County; flows southerly into Embarras River in T. 15 N., R. 9 E., Douglas County; length about 20 miles; drainage area 127 square miles. (Ohio River Drainage.)

Ewing Creek rises in Sec. 30, T. 6 S., R. 5 E., Hamilton County; flows westerly across Franklin County into Middle Fork of Big Muddy River in Sec. 18, T. 7 S., R. 3 E., same county; length about 14½ miles; drainage area 60 square miles. (Mississippi River Drainage.)

Exline Slough rises in T. 33 N., R. 13 E., Will County; flows southerly into Kankakee River in T. 30 N., R. 12 W., Kankakee County; length about 19 miles; drainage area 62 miles. (Mississippi River Drainage.)

Fall Creek rises in T. 3 S., R. 7 W., Adams County; flows southerly into Mississippi River in T. 5 S., R. 7 W., Pike County; length about 17½ miles; drainage area 96 square miles. (Mississippi River Drainage.)

Fancy Creek rises in T. 18 N., R. 5 W., Menard County; flows southerly into Sangamon River in T. 16 N., R. 4 W., Sangamon County; length about 10 miles; drainage area 40 square miles. (Mississippi River Drainage.)

Fever Creek rises in T. 1 N., R. 2 E., Lafayette County, Wis.; flows southwest into Galena River in T. 28 N., R. 1 E., JoDaviess County, Ill.; length about 11 miles; drainage area 19 square miles, of which 16 are in Illinois. (Mississippi River Drainage.)

Fishhook Creek rises in T. 4 S., R. 4 W., Pike County; flows northwesterly into McGees Creek in T. 2 S., R. 5 W., Edwards County; length about 10 miles; drainage area 24 square miles. (Mississippi River Drainage.)

Fivemile Creek rises in T. 21 N., R. 10 E., Lee County, flows westerly into Rock River in T. 21 N., R. 7 E., Whiteside County; length about 14½ miles; drainage area 66 square miles. (Mississippi River Drainage.)

Fivemile Creek rises in T. 28 N., R. 9 E., Ford County; flows southwesterly into North Fork of Vermilion River in T. 27 N., R. 6 E., same county; length about 21 miles; drainage area 99 square miles. (Mississippi River Drainage.)

Flag Creek rises in Sec. 10, T. 38 N., R. 11 E., DuPage County; flows east and south into Desplaines River in Sec. 1, T. 37 N., R. 11 E., same county; length about 11 miles; drainage area 19 square miles (Mississippi River Drainage.)

Flat Branch (see Beaver Creek.)

Flat Branch (see Kaskaskia River.)

Flat Branch (see Sangamon River.)

Flint Creek rises in T. 14 N., R. 3 E., Shelby County; flows northerly into Sangamon River in T. 16 N., R. 2 E., Macon County; length about 18 miles; drainage area 104 square miles. (Mississippi River Drainage.)

Flower Creek rises in T. 3 N., R. 6 W., Hancock County; flows easterly into Crooked Creek in T. 3 N., R. 4 W., Schuyler County; length about 15½ miles; drainage area 63 square miles. (Mississippi River Drainage.)

Foreman Creek rises in T. 12 N., R. 2 E., Knox County; flows easterly into Walnut Creek in T. 13 N., R. 3 E., same county; length about 9 miles; drainage area 23 square miles. (Mississippi River Drainage.)

Forked Creek Rises in T. 33 N., R. 12 E., Will County; flows southwest into Kankakee River in T. 33 N., R. 9 E., same county; length about 25 miles; drainage area 151 square miles. (Mississippi River Drainage.)

Forked Creek (West Branch) rises in T. 34 N., R. 13 E., Will County; flows southwest into Forked Creek in T. 32 N., R. 10 E., same county; length about 22½ miles; drainage area 61 square miles. (Mississippi River Drainage.)

Fountain Creek rises in T. 2 S., R. 10 W., Monroe County; flows southwesterly into Mississippi River in T. 3 S., R. 11 W., same county; length about 25 miles; drainage area 65 square miles. (Mississippi River Drainage.)

Fox River rises in the northern part of Waukesha County, Wis., flows southerly to the State line and through McHenry and Kane Counties, Ill., thence southwesterly through Kendall and LaSalle Counties into Illinois River in Sec. 11, T. 33 N., R. 3 E., at Ottawa; length about 172 miles, of which 103 miles are in Illinois; drainage area 2,580 square miles, of which 1,680 are in Illinois. Principal tributaries in Illinois are Nippersink Creek, Rock Creek, Somonauk Creek, and Big Indian Creek. (Mississippi River Drainage.)

Fox River rises in T. 5 N., R. 9 E., Richland County; flows southerly across Richland County into Little Wabash River in T. 1 N., R. 10 E., near the boundary between Edwards and Wayne Counties; length about 28 miles; drainage area 156 square miles. (Ohio River Drainage.)

Fraction Run rises in T. 36 N., R. 11 E., Will County; flows west into the Chicago Drainage Canal in Sec. 27, T. 36 N., R. 10 E., same county; length about 6½ miles; drainage area 6 square miles. (Mississippi River Drainage.)

Francis Creek rises in T. 5 N., R. 1 E., Fulton County; flows easterly into Spoon River in the same township; length about 6 miles. (Mississippi River Drainage.)

French Creek rises in T. 11 N., R. 6 E., Peoria County; flows southwesterly into Spoon River in T. 9 N., R. 3 E., Knox County; length about 17 miles; drainage area 69 square miles. (Mississippi River Drainage.)

Fulfer Creek rises in T. 6 N., R. 4 E., Effingham County; flows east into Little Wabash River in T. 6 N., R. 5 E., same county; length about 14 miles; drainage area 38 square miles. (Ohio River Drainage.)

Galena River rises in T. 3 N., R. 1 E., Lafayette County, Wis.; flows southward into Mississippi River in T. 28 N., R. 1 W., JoDaviess County, Ill.; length about 40 square miles; drainage area 197 square miles, of which 52 are in Illinois. (Mississippi River Drainage.)

Galum Creek rises in T. 4 S., R. 4 W., Perry County; flows southeasterly across Perry and Jackson Counties into Beaucoup Creek in T. 7 S., R. 2 W., Jackson County; length about 24 miles; drainage area 150 square miles. (Mississippi River Drainage.)

Goose Creek rises in T. 20 N., R. 4 E., DeWitt County; flows southeasterly into Sangamon River in T. 18 N., R. 5 E., near Monticello; length about 11 miles; drainage area 72 square miles. (Mississippi River Drainage.)

Gooseberry Creek rises in T. 27 N., R. 7 E., Livingston County; flows northerly into the East Fork of Mazon River in T. 30 N., R. 8 E., same county; length about 11 miles; drainage area 45 square miles. (Mississippi River Drainage.)

Grand Calumet River rises in T. 37 N., R. 7 W. Lake County, Indiana; flows westward across Lake County to the state line,, thence northward to Cook County and into Lake Michigan; length about 30 miles; drainage area 689 square miles, of which 234 are in Illinois. Principal tributary is Little Calumet River. Calumet Lake, having an area of 3¼ square miles, is tributary about 6 miles above the mouth. (Lake Michigan Drainage.)

Grant Creek rises in T. 34 N., R. 10 E., Will County; flows west into Desplaines River, Sec. 31, T. 34 N., R. 9 E., in same county; length about 8½ miles; drainage area 14 square miles. (Mississippi River Drainage.)

Great Pierce Creek rises in T. 11 S., R. 7 E., Pope County; flows southerly into Ohio River in T. 12 S., R. 7 E., same county; length about 14 miles; drainage area 84 square miles. (Ohio River Drainage.)

Great Pierce Creek (West Branch) rises in T. 11 S., R. 7 E., Pope County; flows southeast into Great Pierce Creek in T. 12 S., R. 7 E., same county; length about 8 miles. (Ohio River Drainage.)

Green River rises in T. 39 N., R. 2 E., Lee County; flows southwesterly through Lee, Bureau and Henry counties into Rock River in T. 17 N., R. 1 E., Henry County; length about 93 miles; drainage area 1,000 square miles. (Mississippi River Drainage.)

Green Creek rises in T. 10 N., R. 6 E., Shelby County; flows southerly into Little Wabash River in T. 8 N., R. 5 E., Effingham County; length about 11½ miles; drainage area 69 square miles. (Ohio River Drainage.)

Grindstone Creek rises in T. 5 N., R. 1 W., McDonough County; flows southwesterly into Camp Creek in T. 4 N., R. 3 W., Schuyler County; length about 16 miles; drainage area 62 square miles. (Mississippi River Drainage.)

Hadley Creek rises in T. 4 S., R. 5 W., Pike County; flows southwesterly into Mississippi River in T. 5 S., R. 7 W., same county; length about 18½ miles; drainage area 84 square miles. (Mississippi River Drainage.)

Halltown Creek rises in Sec. 14, T. 7 S., R. 4 E., Franklin County; flows southeasterly into Middle Fork of Saline River in Sec. 32, same township; length about 4½ miles; drainage area 6 square miles. (Ohio River Drainage.)

Haw Creek rises in T. 3 S., R. 5 E., Hamilton County; flows easterly into Skillet Fork in T. 3 S., R. 7 E., same county; length about 22 miles; drainage area 167 square miles. (Ohio River Drainage.)

Henderson River rises in T. 13 N., R. 1 E., Knox County; flows west and southwest into Mississippi River in T. 10 N., R. 6 W., Henderson County; length about 50 miles; drainage area 598 square miles. (Mississippi River Drainage.)

Henderson River (South Fork) rises in T. 10 N., R. 2 W., Warren County; flows westerly into Henderson River in T. 10 N., R. 5 W., Henderson County; length about 22½ miles; drainage area 71 square miles. (Mississippi River Drainage.)

Henline Creek rises in T. 27 N., R. 7 E., near boundary line between Ford and McLean counties; flows westerly into Mackinaw River in T. 25

N., R. 4 E., McLean County; length about 17½ miles; drainage area 41 square miles. (Mississippi River Drainage.)

Henry Creek rises in T. 12 N., R. 8 E., Marshall County; flows southeast into Senachwine Creek in T. 11 N., R. 8 E., Peoria County; length about 6½ miles; drainage area 20 square miles. (Mississippi River Drainage.)

Hickory Creek rises in T. 17 N., R. 7 E., Bureau County; flows westerly into Mud Creek in T. 17 N., R. 5 E., Henry County; length about 20 miles; drainage area 167 square miles. (Mississippi River Drainage.)

Hickory Creek rises in T. 36 N., R. 12 E., Cook County; flows westerly into Desplaines River in Sec. 21, T. 35 N., R. 10 E., Will County; length about 21 miles; drainage area 98 square miles. (Mississippi River Drainage.)

Hickory Creek rises in T. 7 N., R. 3 E., Fayette County; flows westerly into Kaskaskia River in T. 6 N., R. 1 E., about three miles below Vandalia, in the same county; length about 19 miles; drainage area 122 square miles. (Mississippi River Drainage.)

Hickory Run rises in Sec. 31, T. 11 N., R. 7 E., Peoria County; flows southerly into Kickapoo Creek in T. 10 N., R. 7 E., same county; length about 7 miles. (Mississippi River Drainage.)

Hog Branch (see Beaver Creek).

Hog Run rises in T. 32 N., R. 5 E., LaSalle County; flows northerly into Illinois River in Sec. 30, T. 33 N., R. 6 E., Grundy County; length about 12 miles; drainage area 23 square miles. (Mississippi River Drainage.)

Hog Thief Branch (see Big Creek).

Honey Creek rises in T. 8 N., R. 3 W., Warren County; flows westerly into Mississippi River in T. 8 N., R. 6 W., Henderson County; length about 22 miles; drainage area 82 square miles. (Mississippi River Drainage.)

Honey Creek rises in T. 5 S., R. 4 W., Pike County; flows southerly into Bay Creek in T. 7 S., R. 3 W., same county; length about 12 miles; drainage area 40 square miles. (Mississippi River Drainage.)

Honey Creek rises in T. 6 N., R. 12 W., Crawford County; flows southerly into Embarras River in T. 5 N., R. 13 W., same county; length about 10 miles; drainage area 38 square miles. (Ohio River Drainage.)

Horse Creek rises in T. 31 N., R. 9 E., Kankakee County; flows north into Kankakee River in T. 32 N., R. 9 E., Will County; length about 18½ miles; drainage area 148 square miles. (Mississippi River Drainage.)

Horse Creek rises in T. 12 N., R. 4 W., Montgomery County; flows northerly into South Fork of Sangamon River in T. 15 N., R. 4 W., Sangamon County; length about 23 miles; drainage area 125 square miles. (Mississippi River Drainage.)

Horse Creek rises in T. 3 S., R. 9 W., Monroe County; flows southeasterly to T. 5 S., R. 8 W., Randolph County and empties into Kaskaskia River; length about 19 miles; drainage area 62 square miles. (Mississippi River Drainage.)

Horse Creek rises in T. 1 N., R. 3 E., Marion County; flows southeasterly into Skillet Fork in T. 2 S., R. 5 E., Wayne County, about two miles above Wayne City; length about 22 miles; drainage area 125 square miles. (Ohio River Drainage.)

Hurricane Creek rises in T. 12 N., R. 12 W., Greene County; flows southwest into Illinois River in Sec. 1, T. 11 N., R. 14 W., same county; length about 14 miles; drainage area 40 square miles. (Mississippi River Drainage.)

Hurricane Creek rises in T. 11 N., R. 7 W., Macoupin County; flows southerly into Macoupin River in T. 9 N., R. 8 W., same county; length about 16 miles; drainage area 48 square miles. (Mississippi River Drainage.)

Hurricane Creek rises in T. 9 N., R. 2 W., Montgomery County; flows southerly into Kaskaskia River in T. 4 N., R. 1 W., Fayette County; length about 34 miles; drainage area 167 square miles. (Mississippi River Drainage.)

Hurricane Creek rises in T. 12 N., R. 10 E., Coles County; flows southerly into Embarras River in T. 10 N., R. 9 E., Cumberland County; length about 14 miles; drainage area 45 square miles. (Ohio River Drainage.)

Hurricane Creek rises in T. 6 N., R. 9 E., Jasper County; flows southerly into Muddy Creek in T. 4 N., R. 8 E., Richland County; length about 13 miles; drainage area 34 square miles. (Ohio River Drainage.)

Hutson Creek rises in T. 8 N., R. 12 W., Crawford County; flows southeasterly into Wabash River in T. 8 N., R. 11 W., same county; length about 9 miles. (Ohio River Drainage.)

Illinois River is formed by the junction of the Desplaines and Kankakee rivers in T. 34 N., R. 8 E., Grundy County; flows southwesterly across the State into Mississippi River in T. 6 N., R. 12 W., at the boundary between Jersey and Calhoun counties; length about 267 miles; drainage area 28,100 square miles, of which 1,020 are in Wisconsin and 3,140 in Indiana. Principal tributaries are: Desplaines, Kankakee, Fox, Vermilion, Mackinaw, Spoon and Sangamon rivers; Crooked, McGees, Apple and Macoupin creeks. (Mississippi River Drainage.)

Indian Creek rises in T. 43 N., R. 10 E., Lake County; flows east into Desplaines River in T. 43 N., R. 11 E., same county; length about 8½ miles; drainage area 26 square miles. (Mississippi River Drainage.)

Indian Creek rises in T. 14 N., R. 5 E., Henry County; flows southerly into Spoon River in T. 12 N., R. 6 E., Stark County; length about 21 miles; drainage area 75 square miles. (Mississippi River Drainage.)

Indian Creek rises in T. 7 N., R. 8 W., Macoupin County; flows southerly into Cahokia Creek in T. 4 N., R. 9 W., same county; length about 15½ miles; drainage area 40 square miles. (Mississippi River Drainage.)

Indian Creek rises in Sec. 36, T. 6 S., R. 8 E., White County; flows southwesterly into Bear Creek in Sec. 8, T. 7 S., R. 8 E., same county; length about 6 miles; drainage area 12 square miles. (Ohio River Drainage.)

Indian Creek rises in T. 17, R. 8 W., Cass County; flows westerly into Illinois River in T. 17 N., R. 13 W., same county; length about 34 miles; drainage area 227 square miles. (Mississippi River Drainage.)

Indian Creek (see Big Indian Creek).

Iroquois River rises about T. 30 N., R. 6 W., Jasper County, Indiana; flows southwesterly across Jasper and Newton counties, Indiana, into Iroquois County, Illinois; thence turns north and empties into Kankakee River in T. 30 N., R. 12 E., Kankakee County, Illinois; length about 87 miles, of which 42 miles are in Illinois and 45 miles in Indiana; drainage area 2,175 square miles, of which 1,240 are in Illinois. Principal tributaries are: Sugar Creek, Spring Creek and Beaver Creek. (Mississippi River Drainage.)

Jackson Creek rises in T. 35 N., R. 12 E., Will County; flows westerly into Desplaines in Sec. 15, T. 34 N., R. 9 E., same county; length about 22 miles; drainage area 58 square miles. (Mississippi River Drainage.)

Joe's Creek rises in T. 12 N., R. 9 W., Macoupin County; flows southwesterly into Otter Creek in T. 10 N., R. 10 W., Greene County; length about 16 miles; drainage area 33 square miles. (Mississippi River Drainage.)

Johnny Run rises in T. 31 N., R. 6 E., Grundy County; flows northeasterly into Mazon River in T. 32 N., R. 8 E., same county; length about 17 miles; drainage area 50 square miles. (Mississippi River Drainage.)

Jordan Creek rises in T. 33 N., R. 11 E., Will County; flows southwest into Forked Creek in T. 33 N., R. 10 E., same county; length about 8 miles; drainage area 26 square miles. (Mississippi River Drainage.)

Jordan Creek rises in T. 11 N., R. 4 E., Shelby County; flows southwesterly into Kaskaskia River in T. 10 N., R. 3 E., same county; length about 8 miles; drainage area 29 square miles. (Mississippi River Drainage.)

Jones Fork (see Salt Creek).

Kankakee River rises in T. 37 N., R. 2 E., Laporte County, Indiana; flows westerly to the state line forming the boundary between Porter and Jasper counties and Lake and Newton counties in Indiana; in Illinois it flows northwesterly to the southwest corner of Will County and unites with the Desplaines to form the Illinois River in T. 34 N., R. 8 E., Grundy County, Illinois; length about 135 miles, of which 50 miles are in Illinois and 85 miles in Indiana; drainage area 5,280 square miles, of which 2,140 are in Illinois. Principal tributaries in Illinois are Trimm Creek, Exline Slough, Iroquois River, Rock Creek and Forked Creek. (Mississippi River Drainage.)

Kaskaskia (or Okaw) River rises in T. 20 N., R. 8 E., near Urbana, Champaign County; flows southwesterly across Champaign, Douglas, Moultrie, Shelby, Fayette, Clinton, St. Clair and Randolph counties into Mississippi River in T. 6 S., R. 8 W., Randolph County; length about 212 miles; drainage area 5,830 square miles. Principal tributaries are: Lake Fork, Apple, West Okaw, Robinson, Richland, Wolf, Beck's, Mitchell, Big, Booz, Camp, Hickory and Hurrican creeks, East Fork, Crooked, Shoal, Sugar, Elkhorn, Mud, Silver, Richland and Horse creeks. (Mississippi River Drainage.)

Kaskaskia River (East Fork) rises in T. 5 N., R. 3 E., Fayette County; flows southwesterly across the northern portion of Marion County, thence northwesterly across the northeast corner of Clinton County and empties into Kaskaskia River in T. 4 N., R. 1 W., in the southwest corner of Fayette County; length about 32 miles; drainage area 249 square miles. (Mississippi River Drainage.)

Kaskaskia River (Flat Branch) rises in T. 14 N., R. 9 E., Coles County; flows westerly into Kaskaskia River in T. 13 N., R. 7 E., same county; length about 12 miles; drainage area 38 square miles. (Mississippi River Drainage.)

Kaskaskia River (Lake Fork) rises in T. 19 N., R. 7 E., Champaign County; flows southerly across Champaign and Piatt counties into Kaskaskia River in T. 15 N., R. 7 E., Douglas County; length about 32 miles; drainage area 206 square miles. (Mississippi River Drainage.)

Kerton Creek rises in T. 3 N., R. 2 E., Fulton County; flows southeast into Otter Creek in T. 3 N., R. 3 E., same county; length about 10 miles. (Mississippi River Drainage.)

Kickapoo Creek rises in T. 24 N., R. 3 E., McLean County, near Bloomington; flows southwesterly across McLean and Logan counties into Salt Creek in T. 19 N., R. 3 W., Logan County; length about 45 miles; drainage area 337 square miles. (Mississippi River Drainage.)

Kickapoo Creek rises in T. 12 N., R. 7 E., Coles County; flows east into Riley Creek in T. 12 N., R. 9 E., same county; length about 11 miles; drainage area 45 square miles. (Ohio River Drainage.)

Kickapoo Creek rises in T. 11 N., R. 7 E., Peoria County; flows southwesterly to the central part of the county; thence southeasterly into Illinois River in Sec. 20, T. 8 N., R. 8 E., at Peoria; length about 36 miles; drainage area 303 square miles. (Mississippi River Drainage.)

Kickapoo Creek (West Fork) rises in T. 8 N., R. 5 E., Peoria County; flows easterly into Kickapoo Creek in T. 9 N., R. 6 E., same county; length about 16 miles; drainage area 77 square miles. (Mississippi River Drainage.)

Kilbush Creek rises in T. 40 N., R. 3 E., DeKalb County; flows northwesterly through Ogle County into Kishwaukee River in T. 43 N., R. 1 E., Winnebago County; length about 27 miles; drainage area 218 square miles. (Mississippi River Drainage.)

Kinkaid Creek rises in T. 8 S., R. 4 W., Jackson County; flows southeasterly into Big Muddy River in T. 9 S., R. 3 W., same county; length about 18 miles; drainage area 78 square miles. (Mississippi River Drainage.)

Kinnikinnick Creek rises in T. 46 N., R. 3 E., Boone County; flows westerly into Rock River in T. 46 N., R. 2 E., Winnebago County; length about 10½ miles; drainage area 28 square miles. (Mississippi River Drainage.)

Kiser Creek rises in T. 5 S., R. 4 W., Pike County; flows southwesterly into Mississippi River in T. 6 S., R. 6 W., same county; length about 22 miles; drainage area 86 square miles. (Mississippi River Drainage.)

Kishwaukee River rises in T. 24 N., R. 7 E., McHenry County; flows westerly across McHenry and Boone counties into Rock River in T. 43 N., R. 1 E., Winnebago County; length about 57 miles; drainage area 1,192 square miles. (Mississippi River Drainage.)

Kishwaukee River (North Branch) rises in T. 46 N., R. 6 E., McHenry County; flows southerly into Kishwaukee River in T. 44 N., R. 6 E., same county; length about 14½ miles; drainage area 40 square miles. (Mississippi River Drainage.)

Kishwaukee River (South Branch or South Kishwaukee River) rises in T. 38 N., R. 3 E., DeKalb County; flows northwesterly across DeKalb County into Kishwaukee River in T. 43 N., R. 2 E., Winnebago County; length about 58 miles; drainage area 412 square miles. (Mississippi River Drainage.)

Kyte River rises in T. 39 N., R. 2 E., Lee County; flows northwesterly into Rock River in T. 23 N., R. 11 E., Ogle County; length about 24 miles; drainage area 225 square miles. (Mississippi River Drainage.)

LaHarpe Creek rises in T. 7 N., R. 3 W., McDonough County; flows southwesterly into Crooked Creek in T. 6 N., R. 6 W., Hancock County; length about 19 miles; drainage area 96 square miles. (Mississippi River Drainage.)

Lake Branch (see Sugar Creek).

Lake Fork (see Kaskaskia River).

Lake Fork (see Salt Creek).

Lake Fork (see Sangamon River).

Lake Fork (see Silver Creek).

Lake Creek rises in Sec. 25, T. 8 S., R. 3 E., Williamson County; flows northwesterly into Pond Creek in Sec. 8, T. 8 S., R. 2 E., same county; length about 15½ miles; drainage area 35 square miles. (Mississippi River Drainage.)

Lamarsh Creek is formed by the East and West Branch, both of which rise in T. 8 N., R. 7 E., Peoria County flow south to unite in T. 7 N., R. 7 E.; main stream flows south into Illinois River in Sec. 28, T. 7 N., R. 7 E., same county; length of East Branch about 7 miles; of West Branch about 10 miles; of main stream about 2½ miles; drainage area 45 square miles. (Mississippi River Drainage.)

LaMatte Creek rises in T. 6 N., R. 12 W., Crawford County; flows easterly into Wabash River in T. 6 N., R. 11 W., same county; length about 9 miles. (Ohio River Drainage.)

Larks Creek rises in T. 6 N., R. 7 W., Hancock County; flows westerly into Mississippi River in T. 6 N., R. 8 W., same county; length about 8½ miles. (Mississippi River Drainage.)

Laws Creek rises in T. 7 N., R. 8 E., Jasper County; flows southerly into Muddy Creek in T. 4 N., R. 8 E., Richland County; length about 22 miles; drainage area 56 square miles. (Ohio River Drainage.)

Leaf River rises in T. 25 N., R. 7 E., Carroll County; flows easterly into Rock River in T. 24 N., R. 11 E., Ogle County; length about 22 miles; drainage area 112 square miles. (Mississippi River Drainage.)

Lick Creek rises in T. 15 N., R. 8 W., Sangamon County; flows easterly into Sugar Creek in T. 14 N., R. 5 W., same county; length about 26 miles; drainage area 162 square miles. (Mississippi River Drainage.)

Little Apple Creek rises in T. 14 N., R. 9 W., Morgan County; flows southwesterly into Apple Creek in T. 12 N., R. 9 W., Macoupin County; length about 13 miles; drainage area 26 square miles. (Mississippi River Drainage.)

Little Bon Pas Creek rises in T. 2 N., R. 13 W., Lawrence County; flows southwest into Bon Pas Creek in T. 1 N., R. 14 W., Wabash County; length about 12½ miles; drainage area 57 square miles. (Ohio River Drainage.)

Little Calumet River rises in T. 36 N., R. 6 W., Laporte County, Indiana; flows westerly across Porter and Lake counties, Indiana, Cook County, Illinois, to Sec. 31, T. 16 N., R. 14 E., thence easterly into Grand Calumet River in Sec. 31, T. 17 N., R. 15 E., Cook County; length about 56 miles; drainage area 608 square miles, of which 201 are in Illinois. (Lake Michigan Drainage.)

Little Canteen Creek rises in Sec. 21, T. 2 N., R. 8 W., St. Clair County; flows westerly into Canteen Creek near the northern boundary of the county; length about 6 miles. (Mississippi River Drainage.)

Little Crooked Creek rises in T. 1 S., R. 2 W., Washington County; flows westerly and northerly into Crooked Creek at the boundary between Clinton and Washington counties in T. 1 N., R. 3 W.; length about 17½ miles; drainage area 102 square miles. (Mississippi River Drainage.)

Little Galum Creek rises in T. 5 S., R. 3 W., Perry County; flows southerly into Galum Creek in the same county; length about 9½ miles; drainage area 27 square miles. (Mississippi River Drainage.)

Little Henderson Creek rises in T. 13 N., R. 1 E., Knox County; flows southwest into Henderson River in T. 12 N., R. 4 W., Henderson County; length about 31 miles; drainage area 35 square miles. (Mississippi River Drainage.)

Little Indian Creek rises in T. 38 N., R. 4 E., DeKalb County; flows southerly into Big Indian Creek in T. 35 N., R. 4 E., LaSalle County; length about 28 miles; drainage area 85 square miles. (Mississippi River Drainage.)

Little Mackinaw River rises in T. 24 N., R. 1 W., McLean County; flows southwesterly into Mackinaw River in T. 23 N., R. 3 W., Tazewell County; length about 13 miles; drainage area 53 square miles. (Mississippi River Drainage.)

Little Marys River rises in T. 5 S., R. 5 W., Randolph County; flows southerly into Marys River in T. 7 S., R. 6 W., same county; length about 15 miles; drainage area 60 square miles. (Mississippi River Drainage.)

Little Missouri Creek rises in T. 1 N., R. 5 W., Adams County; flows northeasterly into Crooked Creek in T. 1 N., R. 3 W., Schuyler County; length about 19 miles; drainage area 94 square miles. (Mississippi River Drainage.)

Little Muddy River rises in T. 2 S., R. 1 W., Washington County; flows southerly through Washington, Franklin and Jefferson counties, into Big Muddy River in T. 8 S., R. 1 W., Jackson County; length about 46 miles; drainage area 290 square miles. (Mississippi River Drainage.)

Little Muddy Creek rises in T. 6 N., R. 7 E., Effingham County; flows south into Muddy Creek in T. 3 N., R. 8 E., at the boundary between Clay and Richland counties; length about 25 miles; drainage area 62 square miles. (Ohio River Drainage.)

Little Piasa Creek rises in T. 7 N., R. 10 W., Jersey County; flows southwesterly into Piasa Creek in T. 6 N., R. 10 W., Madison County; length about 9 miles. (Mississippi River Drainage.)

Little Rock Creek rises in T. 39 N., R. 4 E., DeKalb County; flows southeasterly into Rock Creek in T. 37 N., R. 6 E., Kendall County; length about 22 miles; drainage area 55 square miles. (Mississippi River Drainage.)

Little Salt Creek rises in T. 8 N., R. 7 E., Effingham County; flows southerly into Salt Creek in T. 7 N., R. 6 E., same county; length about 12½ miles; drainage area 28 square miles. (Ohio River Drainage.)

Little Rush Creek rises in T. 27 N., R. 3 E., JoDaviess County; flows southerly into Rush Creek in T. 26 N., R. 3 E., same county; length about 9½ miles. (Mississippi River Drainage.)

Little Silver Creek rises in T. 3 N., R. 6 W., Madison County; flows southerly into Silver Creek in Sec. 1, T. 1 N., R. 7 W., same county; length about 12 miles; drainage area 48 square miles. (Mississippi River Drainage.)

Little Silver Creek (East Branch) rises in Sec. 7, T. 2 N., R. 5 W., Clinton County; flows westerly into Little Silver Creek in T. 2 N., R. 6 W., same county; length about 8 miles; drainage area 14 square miles. (Mississippi River Drainage.)

Little Vermilion River rises in T. 18 N., R. 10 E., Champaign County, Illinois; flows easterly across Champaign and Vermilion counties, Illinois, and into Wabash River in T. 17 N., R. 9 W., Vermilion county, Indiana; length about 40 miles; drainage area 213 square miles, of which 179 are in Illinois. (Ohio River Drainage.)

Little Vermilion River rises in T. 36 N., R. 1 E., LaSalle County; flows southerly into Illinois River in Sec. 14, T. 33 N., R. 1 E., same county; length about 24 miles; drainage area 124 square miles. (Mississippi River Drainage.)

Little Wabash River rises in T. 12 N., R. 6 E., near the boundary line between Shelby and Coles counties; flows southerly through Coles, Shelby and Effingham counties to the central part of Clay County, thence in a southerly course across Clay, Wayne and White counties and empties into Wabash River about 15 miles above its mouth at the boundary line between

White and Gallatin counties; length is about 160 miles; drainage area 3,190 square miles. Principal tributaries are: Bigg, Fulfer, Salt, Bishop, Crooked and Muddy creeks, Fox River, Sugar Creek, Elm Creek and Skillet Fork. (Ohio River Drainage.)

Little Wabash River (Dry Fork) rises in T. 1 N., R. 6 E., Wayne County; flows southerly into Skillet Fork in T. 2 S., R. 6 E., same county; length about 19 miles; drainage area 76 square miles. (Ohio River Drainage.)

Little Wabash River (Skillet Fork) rises in T. 4 N., R. 4 E., near the boundary between Clay and Marion counties; flows southerly near the eastern boundary of Marion County to the Jefferson County line, thence turns southeasterly across Wayne County and empties into Little Wabash River in T. 4 S., R. 10 E., in the central part of White County; length about 78 miles; drainage area 1,080 square miles. Principal tributaries are: Brush, Horse and Fourmile creeks, Dry Fork and Haw Creek. (Ohio River Drainage.)

Long Run rises in T. 36 N., R. 12 E., Cook County; flows west into the Chicago Drainage Canal in Sec. 14, T. 36 N., R. 10 E.; length about 11½ miles; drainage area 27 square miles. (Mississippi River Drainage.)

Long Creek rises in T. 5 N., R. 7 W., Hancock County; flows easterly into Crooked Creek in T. 5 N., R. 6 W., same county; length about 10 miles; drainage area 27 square miles. (Mississippi River Drainage.)

Long Point Creek rises in T. 29 N., R. 2 E., Marshall County; flows northeasterly into Vermilion River in T. 30 N., R. 4 E., Livingston County; length about 16 miles; drainage area 96 square miles. (Mississippi River Drainage.)

Longum Creek rises in T. 28 N., R. 10 E., Iroquois County; flows northeasterly into Iroquois River in T. 29 N., R. 13 W., same county; length about 17½ miles; drainage area 115 square miles. (Mississippi River Drainage.)

Loop Creek rises in Sec. 13, T. 1 N., R. 8 W., St. Clair County; flows easterly across T. 1 N., R. 7 W., into Silver Creek; length about 10 miles; drainage area 30 square miles. (Mississippi River Drainage.)

Lost Creek rises in T. 11 N., R. 10 E., Coles County; flows southerly into Embarras River in T. 10 N., R. 9 E., Cumberland County; length about 11½ miles; drainage area 27 square miles. (Ohio River Drainage.)

Lost Creek rises in T. 3 N., R. 1 E., Marion County; flows southwesterly into Crooked Creek in T. 1 N., R. 2 W., Clinton County; length about 20½ miles; drainage area 87 square miles. (Mississippi River Drainage.)

Lost Creek rises in Sec. 16, T. 24 N., R. 4 W., Tazewell County; flows southerly and northwesterly into Mackinaw River about one-half mile above its mouth; length about 12 miles; drainage area 29 square miles. (Mississippi River Drainage.)

Lucas Creek rises in T. 6 N., R. 7 E., Effingham County; flows southwesterly into Little Wabash River in T. 5 N., R. 6 E., Clay County; length about 12 miles; drainage area 22 square miles. (Ohio River Drainage.)

Lusk Creek rises in T. 11 S., R. 6 E., Pope County; flows southerly into Ohio River at Golconda; length about 22 miles; drainage area 70 square miles. (Ohio River Drainage.)

McCraney Creek rises in T. 3 S., R. 6 W., Adams County; flows southwesterly into Mississippi River in T. 5 S., R. 7 W., Pike County; length about 18½ miles; drainage area 48 square miles. (Mississippi River Drainage.)

McGees Creek rises in T. 1 N., R. 7 W., Adams County; flows southeasterly across Brown and Pike counties into Illinois river in Sec. 27, T. 3 S., R. 2 W., Pike County; length about 53 miles; drainage area 437 square miles. Principal tributaries are: Walnut Creek, Fishhook Creek, Middle Fork and South Fork. (Mississippi River Drainage.)

McGees Creek (Middle Fork) rises in T. 3 S., R. 4 W., Pike County; flows easterly into McGees Creek in T. 3 S., R. 2 W., same county; length about 20 miles; drainage area 82 square miles. (Mississippi River Drainage.)

McGees Creek (South Fork) rises in T. 4 S., R. 4 W., Pike County; flows easterly into McGees Creek in T. 3 S., R. 2 W., same county; length about 11½ miles; drainage area 26 square miles. (Mississippi River Drainage.)

Mackinaw River rises in T. 25 N., R. 7 E., Ford County; flows westerly across Ford, McLean, Woodford and Tazewell counties into Illinois River in Sec. 9, T. 24 N., R. 5 W., Tazewell County; length about 110 miles; drainage area 1,200 square miles. Principal tributaries are: Henline, Money, Panther, Walnut, Rock, Mud and Dillon creeks. (Mississippi River Drainage.)

Macoupin Creek rises in T. 12 N., R. 5 W., Montgomery County; flows southwesterly across Macoupin and Greene counties into Illinois River in Sec. 24, T. 8 N., R. 14 W., at the boundary between Greene and Jersey counties; length about 90 miles, drainage area 989 square miles. Principal tributaries are: Hurrican, Otter, Taylor's and Phill's creeks. (Mississippi River Drainage.)

Maple Creek rises in T. 9 N., R. 13 W., Clark County; flows southwesterly into Willow Creek in T. 7 N., R. 14 W., Crawford County; length about 14 miles; drainage area 28 square miles. (Ohio River Drainage.)

Marys River rises in T. 4 S., R. 5 W., Randolph County; flows southwesterly into Mississippi River in T. 7 S., R. 6 W., same county; length about 28 miles; drainage area 196 square miles. (Mississippi River Drainage.)

Massac Creek rises in T. 14 S., R. 5 E., Massac County; flows southerly into Ohio River in T. 16 S., R. 5 E., same county; length about 13½ miles; drainage area 33 square miles. (Ohio River Drainage.)

Massac Creek rises in T. 13 N., R. 8 W., Morgan County; flows southwesterly into Otter Creek in T. 10 N., R. 8 W., Macoupin County; length about 14 miles; drainage area 33 square miles. (Mississippi River Drainage.)

Mauvaise Terre Creek rises in T. 13 N., R. 9 W., Morgan County; flows westerly into Illinois River in Sec. 23, T. 15 N., R. 14 W., Scott County; length about 40 miles; drainage area 193 square miles. (Mississippi River Drainage.)

Mazon River rises in T. 29 N., R. 8 E., Livingston County; flows northwest across Grundy County into Illinois River in Sec. 9, T. 33 N., R. 7 E., at Morris; length about 33 miles; drainage area 548 square miles. (Mississippi River Drainage.)

Mazon River (East Fork) rises in T. 29 N., R. 8 E., Livingston County; flows northerly to its junction with the West Fork in T. 32 N., R. 8 E., Grundy County; length about 25 miles; drainage area 253 square miles. (Mississippi River Drainage.)

Mazon River (West Fork) rises in T. 29 N., R. 6 E., Livingston County; flows northeasterly across Grundy County and unites with the East Fork in T. 32 N., R. 8 E., Grundy County; length about 23 miles; drainage area 168 square miles. (Mississippi River Drainage.)

Middle Creek rises in T. 4 N., R. 6 W., Hancock County; flows easterly into Crooked Creek in T. 5 N., R. 5 W., same county; length about 10 miles; drainage area, 23 square miles. (Mississippi River Drainage.)

Middle Fork (see Au Sable Creek).

Middle Fork (see Big Muddy River).

Middle Fork (see McGees Creek).

Middle Fork (see Saline River).

Middle Fork (see Shoal Creek).

Middle Fork (see Sugar Creek).

Middle Fork (see Vermilion River).

Middle Henderson Creek rises in T. 12 N., R. 1 E., Knox County; flows westerly into Henderson River in T. 12 N., R. 4 W., Henderson County; length about 30 miles; drainage area 167 square miles. (Mississippi River Drainage.)

Mill Creek rises in T. 29 N., R. 2 E., JoDaviess County; flows southerly into Apple River in T. 27 N., R. 3 E., same county; length about 10 miles; drainage area 40 square miles. (Mississippi River Drainage.)

Mill Creek rises in T. 15 N., R. 3 E., Mercer County; flows northerly into Rock River in T. 17 N., R. 2 E., about 3½ miles above its mouth; length about 17 miles; drainage area 73 square miles. (Mississippi River Drainage.)

Mill Creek rises in T. 1 S., R. 7 W., Adams County; flows southwesterly into Mississippi River in T. 3 S., R. 9 W., same county; length about 17 miles; drainage area 85 square miles. (Mississippi River Drainage.)

Mill Creek rises in T. 40 N., R. 7 E., Kane County; flows southeasterly into Fox River in T. 39 N., R. 8 E., same county; length about 10 miles; drainage area 20 square miles. (Mississippi River Drainage.)

Mill Creek rises in the western part of T. 3 N., R. 7 W., Madison County; flows southeasterly into Silver Creek in the southeastern part of same township; length about 6 miles; drainage area 12 square miles. (Mississippi River Drainage.)

Mill Creek rises in T. 12 N., R. 13 W., Clark County; flows southeasterly into Wabash River in T. 9 N., R. 11 W., same county; length about 32 miles; drainage area 147 square miles. (Ohio River Drainage.)

Mill Creek rises in T. 13 S., R. 2 W., Union County; flows southerly into Cache River in T. 15 S., R. 1 W., Alexander County; length about 16 miles; drainage area 85 square miles. (Ohio River Drainage.)

Mitchell Creek rises in T. 11 N., R. 2 E., near the western boundary of Shelby County; flows southerly into Kaskaskia River in T. 8 N., R. 2 E., Fayette County; length about 20 miles; drainage area 214 square miles. (Mississippi River Drainage.)

Money Creek rises in T. 23 N., R. 4 E., McLean County; flows northwesterly into Mackinaw River in T. 25 N., R. 2 E., near the northern boundary of same county; length about 27 miles; drainage area 60 square miles. (Mississippi River Drainage.)

Mosquito Creek rises in T. 15 N., R. 1 E., Macon County; flows westerly into Sangamon River in the northern part of Christian County; length about 15½ miles; drainage area 69 square miles. (Mississippi River Drainage.)

Mud Creek rises in T. 14 N., R. 5 E., Henry County; flows northerly into Green River in T. 17 N., R. 4 E., same county; length about 23½ miles; drainage area 269 square miles. (Mississippi River Drainage.)

Mud Creek rises in T. 24 N., R. 14 W., Iroquois County; flows easterly into Sugar Creek in T. 25 N., R. 12 W., same county; length about 20 miles; drainage area 225 square miles. (Mississippi River Drainage.)

Mud Creek rises in T. 30 N., R. 5 E., Livingston County; flows southerly into Vermilion River in T. 30 N., R. 4 E., same county; length about 12 miles; drainage area 57 square miles. (Mississippi River Drainage.)

Mud Creek rises in T. 25 N., R. 2 E., Woodford County; flows southwesterly into Mackinaw River in T. 24 N., R. 3 W., Tazewell County; length about 15 miles; drainage area 58 square miles. (Mississippi River Drainage.)

Mud Creek rises in T. 3 S., R. 4 W., Washington County; flows westerly into Kaskaskia River in T. 2 S., R. 6 W., St. Clair County; length about 20 miles; drainage area 114 square miles. (Mississippi River Drainage.)

Muddy Creek rises in T. 3 N., R. 14 W., Richland County; flows westerly into Embarras River in T. 4 N., R. 12 W., Lawrence County; length about 15 miles; drainage area 93 square miles. (Ohio River Drainage.)

Muddy Creek rises in T. 7 N., R. 8 E., Jasper County; flows southerly across Jasper and Clay counties, forms a portion of the boundary between Clay and Richland counties and empties into Little Wabash River about four miles below Clay City; length about 38 miles; drainage area 304 square miles. Principal tributaries are Laws Creek and Little Muddy Creek. (Ohio River Drainage.)

Negro Creek rises in T. 17 N., R. 11 E., Bureau County; flows southerly into Illinois River in Sec. 31, T. 16 N., R. 11 E., same county; length about 12 miles; drainage area 28 square miles. (Mississippi River Drainage.)

Nettle Creek rises in T. 34 N., R. 5 E., LaSalle County; flows easterly into Illinois River in Sec. 9, T. 33 N., R. 7 E., Grundy County; length about 18 miles; drainage area 70 square miles. (Mississippi River Drainage.)

Nigger Creek rises in T. 9 N., R. 3 W., Warren County; flows southeasterly into Swan Creek in T. 8 N., R. 2 W., same county; length about 12 miles; drainage area 45 square miles. (Mississippi River Drainage.)

Nippersink Creek rises in T. 1 N., R. 16 E., Walworth County, Wis.; flows southeasterly across the State line into Illinois where it enters Fox Lake. Length about 25 miles; drainage area 165 square miles, of which 66 are in Illinois. (Mississippi River Drainage.)

North Fork (see Bruellett's Creek).

North Fork (see Embarras River).

North Fork (see Saline River).

North Fork (see Salt Creek).

North Fork (see Vermilion River).

North Branch (see Crow Creek).

North Branch (see Kishwaukee River).

Ogles Creek rises in Sec. 27, T. 2 N., R. 8 W., St. Clair County; flows northeasterly into Silver Creek in Sec. 3, T. 3 N., R. 7 W., same county; length about 8 miles; drainage area 16 square miles. (Mississippi River Drainage).

Okaw River (see Kaskaskia River).

Otter Creek rises in T. 6 N., R. 12 W., Jersey County; flows north and west into Illinois River in Sec. 7, T. 7 N., R. 13 W., same county; length about 14 miles; drainage area 116 square miles. (Mississippi River Drainage.)

Otter Creek rises in T. 13 N., R. 7 W., Sangamon County; flows southwesterly into Macoupin Creek in T. 9 N., R. 10 W., Jersey County; length about 31 miles; drainage area 221 square miles. (Mississippi River Drainage.)

Otter Creek rises in T. 4 N., R. 1 E., Fulton County; flows southeasterly into Illinois River in Sec. 21, T. 3 N., R. 3 E., same county; length about 25 miles; drainage area 90 square miles. (Mississippi River Drainage.)

Otter Creek rises in T. 24 N., R. 6 E., Carroll County; flows southerly into Rock Creek in T. 23 N., R. 6 E., Whiteside County; length about 12½ miles; drainage area 27 square miles. (Mississippi River Drainage.)

Otter Creek rises in T. 29 N,. R. 9 E., Stephenson County; flows easterly into Sugar River in T. 28 N., R. 11 E., Winnebago County; length about 12 miles; drainage area 56 square miles. (Mississippi River Drainage.)

Otter Creek rises in T. 23 N., R. 4 E., Carroll County; flows southwest into the Mississippi River in T. 22 N., R. 3 E., Whiteside County; length about 6½ miles; drainage area 31 square miles. (Mississippi River Drainage.)

Panther Creek rises in T. 27 N., R. 2 E., Woodford County; flows southwesterly into Mackinaw River in T. 26 N., R. 1 W., same county; length about 24 miles; drainage area 177 square miles. (Mississippi River Drainage.)

Panther Creek rises in T. 5 N., R. 6 E., Clay County; flows southerly into Little Wabash River in T. 4 N., R. 6 E., same county, at Louisville; length about 10 miles; drainage area 29 square miles. (Ohio River Drainage.)

Panther Creek rises in T. 3 N., R. 6 W., Hancock County; flows easterly into Brown Creek in T. 4 N., R. 5 W., same county; length about 8½ miles; drainage area 57 square miles. (Mississippi River Drainage.)

Panther Creek (East Branch) rises in T. 27 N., R. 3 E., Livingston County; flows westerly into Panther Creek in T. 27 N., R. I E., Woodford County; length about 12 miles; drainage area 77 square miles. (Mississippi River Drainage.)

Partridge Creek (see Block Partridge Creek).

Pecatonica River rises in T. 6 N., R. 1 E., Iowa County, Wis.; flows southeasterly across Iowa and Lafayette counties to the State line; thence southerly to the southern part of Stephenson County, Ill.; thence easterly through Stephenson and Winnebago counties into the Rock River in T. 46 N., R. 1 W.; length about 126 miles; drainage area 2,610 square miles, of which 780 are in Illinois. (Mississippi River Drainage.)

Pecumsaugum Creek rises in T. 34 N., R. 2 E., LaSalle County; flows southwest into Illinois River in Sec. 14, T. 33 N., R. 1 E., same county; length about 10½ miles; drainage area 33 square miles. (Mississippi River Drainage.)

Phill's Creek rises in T. 8 N., R. 11 W., Jersey County; flows northerly into Macoupin Creek in T. 9 N., R. 11 W., same county; length about 14 miles; drainage area 66 square miles. (Mississippi River Drainage.)

Phill's Creek (Dorsey Branch) rises in T. 8 N., R. 11 W., Jersey County; flows northerly into Phill's Creek in T. 9 N., R. 11 W., same county; length about 8 miles; drainage area 26 square miles. (Mississippi River Drainage.)

Piasa Creek rises in T. 7 N., R. 9 W., Macoupin County; flows southwesterly into Mississippi River in T. 6 N., R. 11 W., Calhoun County; length about 22½ miles; drainage area 101 square miles. (Mississippi River Drainage.)

Pike Creek rises in T. 44 N., R. 2 E., Winnebago County; flows southwesterly into Rock River at Rockford; length about 8½ miles. (Mississippi River Drainage.)

Pike Creek rises in T. 27 N., R. 3 E., Livingston County; flows northeasterly into Rock Creek in T. 28 N., R. 4 E., same county; length about 12 miles; drainage area 40 square miles. (Mississippi River Drainage.)

Pike Creek rises in T. 18 N., R. 5 W., Menard County; flows northerly into Salt Creek in T. 20 N., R. 5 W., at the northern boundary of the same county; length about 10 miles; drainage area 24 square miles. (Mississippi River Drainage.)

Pilot Grove Creek rises in T. 6 N., R. 7 W., Hancock County; flows easterly into Crooked Creek in T. 5 N., R. 6 W., same county; length about 10 miles; drainage area 28 square miles. (Mississippi River Drainage.)

Pine Creek rises in T. 24 N., R. 9 E., Ogle County; flows southerly into Rock River in T. 22 N., R. 9 E., same county; length about 14 miles; drainage area 60 square miles. (Mississippi River Drainage.)

Pipestone Creek rises in T. 6 S., R. 4 W., Perry County; flows southeasterly into Galum Creek in T. 6 S., R. 3 W., same county; length about 9 miles; drainage area 27 square miles. (Mississippi River Drainage.)

Piscasaw River rises in T. 1 N., R. 16 E., Walworth County; flows southwesterly into Kishwaukee River in T. 44 N., R. 4 E., Boone County, just above Belvidere; length about 24 miles; drainage area 111 square miles. (Mississippi River Drainage.)

Plum Creek rises in T. 26 N., R. 5 E., Stephenson County; flows southwesterly into Plum River in T. 25 N., R. 4 E., Carroll County; length about 16 miles; drainage area 90 square miles. (Mississippi River Drainage.)

Plum Creek rises in T. 15 N., R. 12 W., Scott County; flows southwest into Walnut Creek in Sec. 32, T. 14 N., R. 13 W., same county; length about 13 miles; drainage area 25 square miles. (Mississippi River Drainage.)

Plum Creek rises in T. 4 S., R. 5 W., Randolph County; flows southwesterly into Kaskaskia River in T. 5 S., R. 7 W., same county; length about 20 miles; drainage area 98 square miles. (Mississippi River Drainage.)

Plum River rises in T. 27 N., R. 4 E., JoDaviess County; flows southerly into Mississippi River at Savanna in Carroll County; length about 33 miles; drainage area 307 square miles. (Mississippi River Drainage.)

Pond Creek rises in Sec. 16, T. 8 S., R. 4 E., Williamson County; flows westerly across Williamson and Franklin counties into Big Muddy River in T. 8 S., R. 1 W., Williamson County; length about 22 miles; drainage area 104 square miles. (Mississippi River Drainage.)

Pond Creek rises in T. 1 S., R. 7 E., Wayne County near Fairfield; flows southeasterly into Little Wabash River in T. 2 S., R. 9 E., same county; length about 13 miles; drainage area 39 square miles. (Ohio River Drainage.)

Pope Creek rises in T. 13 N., R. 2 E., Knox County; flows westerly into Mississippi River in T. 13 N., R. 5 W., Mercer County; length about 50 miles; drainage area 167 square miles. (Mississippi River Drainage.)

Potato Creek rises in T. 4 N., R. 1 E., Fulton County; flows easterly into Spoon River in T. 4 N., R. 3 E., same county; length about 10 miles; drainage area 31 square miles. (Mississippi River Drainage.)

Prairie Creek rises in T. 27 N., R. 10 E., Iroquois County; flows northerly into Spring Creek in T. 28 N., R. 13 W., same county; length about 22 miles; drainage area 100 square miles. (Mississippi River Drainage.)

Prairie Creek rises in T. 34 N., R. 10 E., Will County; flows southwest into Kankakee River in T. 33 N., R. 9 E., same county; length about 22 miles; drainage area 64 square miles. (Mississippi River Drainage.)

Prairie Creek rises in Sec. 27, T. 16 N., R. 8 W., Sangamon County; flows easterly into Richland Creek in Sec. 33, T. 17 N., R. 6 W.; length about 15½ miles; drainage area 46 square miles. (Mississippi River Drainage.)

Prairie Creek rises in T. 22 N., R. 3 W., Tazewell County; flows southwesterly across the northwest corner of Logan County into Sugar Creek in T. 20 N., R. 5 W., Mason County; length about 18 miles; drainage area 92 square miles. (Mississippi River Drainage.)

Prairie Creek rises in Sec. 21, T. 8 S., R. 4 E., Williamson County; flows northeasterly into Middle Fork of Saline River in Sec. 16, T. 8 S., R. 5 E., Saline County; length about 8 miles; drainage area 23 square miles. (Ohio River Drainage.)

Prairie du Long Creek rises in T. 1 S., R. 10 W., Monroe County; flows southeasterly into Richland Creek in T. 3 S., R. 7 W., same county; length about 18½ miles; drainage area 87 square miles. (Mississippi River Drainage.)

Prairie du Pont Creek rises in T. 1 S., R. 9 W., St. Clair County; flows north and west into Mississippi River in T. 1 N., R. 10 W., same county; length about 18 miles. (Mississippi River Drainage.)

Put Creek rises in T. 8 N., R. 4 E., Fulton County; flows southwesterly into Spoon River in T. 6 N., R. 2 E., same county; length about 16 miles; drainage area, 105 square miles. (Mississippi River Drainage.)

Quarry Creek rises in T. 6 N., R. 8 W., Hancock County; flows west into Mississippi River in the same township; length about 6½ miles. (Mississippi River Drainage.)

Quiver Creek rises in T. 22 N., R. 7 W., Mason County; flows west into Illinois River in Sec. 30, T. 22 N., R. 8 W., same county; length about 13 miles; drainage area 164 square miles. (Mississippi River Drainage.)

Raccoon Creek rises in T. 3 N., R. 13 W., Lawrence County; flows southeasterly into Wabash River in T. 1 N., R. 11 W., Wabash County; length about 18 miles; drainage area 68 square miles. (Ohio River Drainage.)

Raccoon Creek rises in T. 13 N., R. 5 E., Clay County; flows southeasterly into Elm Creek in T. 2 N., R. 7 E., near the boundary between Clay and Wayne counties; length about 16½ miles; drainage area 72 square miles. (Ohio River Drainage.)

Range Creek rises in T. 10 N., R. 14 W., Clark County; flows southwesterly across the southeast corner of Cumberland County into Embarras River in T. 8 N., R. 9 E., Jasper County; length about 17 miles; drainage area 44 square miles. (Ohio River Drainage.)

Rattlesnake Creek rises in Sec. 31, T. 7 S., R. 3 W., Jackson County; flows southeasterly into Beaucoup Creek in T. 7 S., R. 2 W., same county; length about 9½ miles; drainage area 11 square miles. (Mississippi River Drainage.)

Rayse Creek rises in T. 1 N., R. 2 E., Marion County; flows southerly into Big Muddy River in T. 5 S., R. 2 E., Franklin County; length about 30 miles; drainage area, 69 square miles. (Mississippi River Drainage.)

Rector Creek rises in T. 6 S., R. 5 E., Hamilton County; flows southeasterly into the North Fork of Saline River in T. 7 S., R. 7 E., same county; length about 19 miles; drainage area 81 square miles. (Ohio River Drainage.)

Reese Creek rises in T. 4 S., R. 1 W., Prairie County; flows southerly into Little Muddy River in T. 6 S., R. 1 W., same county; length about 14 miles; drainage area 38 square miles. (Mississippi River Drainage.)

Richland Creek rises in T. 2 N., R. 7 E., Greene County, Wisconsin; flows southerly into Pecatonica River in T. 27 N., R. 7 E., Stephenson County, Illinois, length about 22 miles, of which 12 miles are in Illinois; drainage area 137 square miles, of which 79 are in Illinois. (Mississippi River Drainage.)

Richland Creek rises in T. 28 N., R. 1 W., Woodford County; flows westerly into Illinois River in T. 28 N., R. 1 W., same county; length about 17 miles; drainage area 51 square miles. (Mississippi River Drainage.)

Richland Creek rises in Sec. 2, T. 16 N., R. 8 W., Sangamon County; flows east into Sangamon River in Sec. 22, T. 17 N., R. 6 W., same county; length about 16½ miles; drainage area 93 square miles. (Mississippi River Drainage.)

Richland Creek rises in T. 11 N., R. 5 E., Shelby County; flows southwesterly into Kaskaskia River in T. 9 N., R. 3 E., same county; length about 22 miles; drainage area 94 square miles. (Mississippi River Drainage.)

Richland Creek rises in Sec. 36, T. 2 N., R. 8 W., St. Clair County, near Belleville; flows southerly into Kaskaskia River in T. 3 S., R. 7 W., same county; length about 24 miles; drainage area 233 square miles. (Mississippi River Drainage.)

Richland Creek (West Branch) rises in T. 1 S., R. 9 W., St. Clair County; flows southeasterly into Richland Creek in T. 2 S., R. 8 W., same county; length about 15½ miles; drainage area 27 square miles. (Mississippi River Drainage.)

Riley Creek rises in T. 12 N., R. 8 E., Coles County; flows easterly into Embarras River in T. 12 N., R. 9 E., same county; length about 12 miles; drainage area 108 square miles. (Ohio River Drainage.)

Robinson Creek rises in T. 13 N., R. 3 E., Shelby County; flows southerly into Kaskaskia River about 5 miles below Shelbyville in the central part of the same county; length about 22 miles; drainage area 110 square miles. (Mississippi River Drainage.)

Rock Creek rises in T. 24 N., R. 6 E., Carroll County; flows southerly into Rock River in T. 19 N., R. 4 E., Whiteside County; length about 43 miles; drainage area 215 square miles. (Mississippi River Drainage.)

Rock Creek rises in T. 1 S., R. 8 W., Adams County; flows westerly into Mississippi River in T. 1 N., R. 9 W., same county; length about 11 miles; drainage area 30 square miles. (Mississippi River Drainage.)

Rock Creek rises in T. 33 N., R. 12 E., Will County; flows southwest into Kankakee River in T. 32 N., R. 11 E., same county; length about 16 miles; drainage area 107 square miles. (Mississippi River Drainage.)

Rock Creek rises in T. 39 N., R. 6 E., Kane County; flows southerly into Fox River in T. 37 N., R. 6 E., Kendall County; length about 22 miles; drainage area 84 square miles. (Mississippi River Drainage.)

Rock Creek rises in T. 25 N., R. 5 E., McLean County; flows northerly into Vermilion River in T. 29 N., R. 4 E., Livingston County; length about 25 miles; drainage area 128 square miles. (Mississippi River Drainage.)

Rock Creek rises in T. 24 N., R. 1 E., McLean County; flows northwesterly into Mackinaw River in T. 25 N., R. 2 W., same county; length about 13 miles; drainage area 32 square miles. (Mississippi River Drainage.)

Rock Creek rises in Sec. 18, T. 17 N., R. 7 W., Menard County; flows northeasterly into Sangamon River in Sec. 4, T. 17 N., R. 6 W., same county; length about 9½ miles; drainage area 18 square miles. (Mississippi River Drainage.)

Rock Creek rises in T. 6 N., R. 7 W., Hancock County; flows easterly into Crooked Creek in T. 5 N., R. 6 W., same county; length about 12½ miles; drainage are 30 square miles. (Mississippi River Drainage.)

Rock River has two sources, East and West Branches. Considering the East Branch as the main stream, the river rises in T. 11 N., R. 19 E., Washington County, Wis.; flows southerly through Dodge, Jefferson and Polk Counties in Wisconsin to the Illinois State line; thence southwesterly through Winnebago, Ogle, Lee, Whiteside and Island counties in Illinois into the Mississippi River about 6 miles below Rock Island, Ill.; length about 300 miles; drainage area 10,820 square miles, of which 5,310 are in Illinois. Elevations above sea level are as follows: Source, 1,000 feet; Horicon, 858 Feet; State line, 731 feet; mouth, 540 feet. Principal tributaries are: In Wisconsin, East Branch, West Branch, Crawfish River, Bark

River, Bass Creek Turtle Creek; in Illinois, Pecatonica River Kishwaukee River, Elkhorn Creek, Rock Creek, and Green River. (Mississippi River Drainage.)

Rock Run rises in T. 29 N., R. 9 E., Stephenson County; flows southerly into Pecatonica River in T. 27 N., R. 9 E., same county; length about 13½ miles; drainage area 89 square miles. (Mississippi River Drainage.)

Rock Run rises in T. 35 N., R. 9 E., Will County; flows south into the Illinois and Michigan Canal in Sec. 27 of the same township; length about 8 miles; drainage area 13 square miles. (Mississippi River Drainage.)

Rush Creek rises in T. 46 N., R. 6 E., McHenry County; flows southwesterly into Kishwaukee River in T. 44 N., R. 5 E., same county; length about 13 miles; drainage area 42 square miles. (Mississippi River Drainage.)

Rush Creek rises in T. 28 N., R. 4 E., JoDaviess County; flows southerly into Mississippi River in T. 25 N., R. 3 E., same county; length about 21½ miles; drainage area 93 square miles. (Mississippi River Drainage.)

Saline River has its source in the North Fork which rises in T. 5 S., R. 5 E., Hamilton County; flows southeasterly across Hamilton and Gallatin counties into Ohio River in T. 11 S., R. 10 E., Hardin County, about nine miles below Shawneetown; length about 62 miles; drainage area 1,130 square miles. Principal tributaries are: North, Middle and South Forks, Bear, Contrary, Rector and Bankstone Creeks. (Ohio River Drainage.)

Saline River (Middle Fork) rises in Sec. 1, T. 7 S., R. 4 E., Hamilton County; flows southeasterly into the South Fork in T. 9 S., R. 7 E., same county; length about 26 miles; drainage area 246 square miles. (Ohio River Drainage.)

Saline River (North Fork) rises in T. 5 S., R. 5 E., Hamilton County; flows southeasterly through Hamilton and Gallatin counties and unites with the South Fork in the western part of Gallatin County; length about 44 miles; drainage area 472 square miles. (Ohio River Drainage.)

Saline River (South Fork) rises in T. 11 S., R. 2 E., Johnson County; flows northerly and easterly and joins the North Fork in T. 9 S., R. 8 E., Gallatin County; length about 49 miles; drainage area 527 square miles. Principal tributaries are: Sugar Creek and Middle Fork. (Ohio River Drainage.)

Salt Creek rises at the northern boundary of T. 22 N., R. 6 E., McLean County; flows southwesterly through McLean, DeWitt and Logan counties, forms a portion of the boundary between Mason and Menard counties, and flows into Sangamon River at the northern boundary of Menard County in T. 19 N., R. 6 W.; length about 92 miles; drainage area 1,940 square miles. Principal tributaries are: North Fork, Lake Fork, Deer Creek, Kickapoo Creek and Prairie Creek. (Mississippi River Drainage.)

Salt Creek rises in T. 8 N., R. 7 E., Effingham County; flows southwesterly into Little Wabash River in T. 6 N., R. 6 E., same county; length about 22 miles; drainage area 98 square miles. Principal tributary is: Little Salt Creek. (Ohio River Drainage.)

Salt Creek rises in T. 42 N., R. 10 E., Cook County; flows southerly and easterly into Desplaines River in Sec. 2, T. 38 N., R. 12 E., at Riverside, Cook County; length about 33 miles; drainage area 170 square miles. (Mississippi River Drainage.)

Salt Creek (Jones Fork) rises in T. 17 N., R. 2 E., Mason County; flows westerly into Lake Fork in T. 17 N., R. 1 W., same county; length about 16½ miles; drainage area 71 square miles. (Mississippi River Drainage.)

Salt Creek (Lake Fork) rises in T. 18 N., R. 2 E., Macon County; flows west and north into Salt Creek in T. 17 N., R. 1 W., Logan County; length about 39 miles; drainage area 279 square miles. (Mississippi River Drainage.)

Salt Creek (North Fork) rises in T. 23 N., R. 5 E., McLean County; flows southwesterly into Salt Creek in T. 20 N., R. 3 E., DeWitt County; length about 23 miles; drainage area 138 square miles. (Mississippi River Drainage.)

Salt Fork (see Vermilion River).

Sand Creek rises in T. 12 N., R. 6 E., Shelby County; flows westerly into Kaskaskia River in T. 12 N., R. 4 E., same county; length about 9 miles; drainage area 28 square miles. (Mississippi River Drainage.)

Sand Creek rises in T. 6 N., R. 2 E., Fayette County; flows westerly into Hickory Creek near its junction with Kaskaskia River; length about 12 miles; drainage area 24 square miles. (Mississippi River Drainage.)

Sandy Creek rises in T. 30 N., R. 2 E., Marshall County; flows west into Illinois River in Sec. 33, T. 31 N., R. 2 W., Putnam County; length about 18 miles; drainage area 135 square miles. (Mississippi River Drainage.)

Sangamon River rises in T. 23 N., R. 4 E., McLean County; flows southeasterly to Champaign County, thence southwesterly across Champaign and Piatt counties to Decatur, Macon County, thence westerly until near Springfield, thence northwestward to its junction with Salt Creek at the northern boundary of Menard County, thence westerly into Illinois River in Sec. 5, T. 19 N., R. 11 W., Cass County; length about 200 miles; drainage area 5,390 square miles. Principal tributaries are: Stevens, Camp, Mosquito and Buckhart creeks; South Fork, Sugar, Spring, Prairie, Rock Salt and Crane creeks. (Mississippi River Drainage.)

Sangamon River (Flat Branch) rises in T. 13 N., R. 3 E., Shelby County; flows westerly to the central part of Christian County near Taylorville and empties into the South Fork of Sangamon River in T. 16 N., R. 4 W., Sangamon County; length about 27 miles; drainage area 283 square miles. (Mississippi River Drainage.)

Sangamon River (Lake Fork) rises in T. 11 N., R. 1 W., Christian County; flows northeast into Flat Branch of Sangamon River in T. 13 N., R. 2 E., Shelby County; length about 15 miles. (Mississippi River Drainage.)

Sangamon River (South Fork) rises in T. 11 N., R. 1 W., Christian County; flows northwesterly across Christian County to the central part of Sangamon County and empties into Sangamon River about 3 miles above Riverton; length about 55 miles; drainage area 817 square miles. Principal tributaries are: Flat Branch, Bear and Horse creeks. (Mississippi River Drainage.)

Saratoga Creek rises in T. 35 N., R. 6 E., Kendall County; flows southeasterly into Nettle Creek at Morris; length about 12½ miles; drainage area 22 square miles. (Mississippi River Drainage.)

Scattering Fork (see Embarras River).

Scattering Rock Creek rises in T. 27 N., R. 3 E., Livingston County; flows northerly into Vermilion River in T. 29 N., R. 4 E., same county; length about 14 miles; drainage area 68 square miles. (Mississippi River Drainage.)

Schoenberger Creek rises in Sec. 23, T. 2 N., R. 8 W., St. Clair County; flows west and north into Cahokia Creek just above East St. Louis; length about 8 miles. (Mississippi River Drainage.)

Senachwine Creek rises in T. 13 N., R. 8 E., Marshall County; flows southeasterly into Illinois River in Sec. 15, T. 11 N., R. 9 E., Peoria County; length about 20 miles; drainage area 96 square miles. (Mississippi River Drainage.)

Sevenmile Creek rises in T. 15 S., R. 5 E., Massac County; flows southerly into Ohio River in T. 16 S., R. 5 E., same county; length about 8½ miles. (Ohio River Drainage.)

Shaw's Fork (see Spoon River).

Shoal Creek has its source in the West Fork which rises in T. 11 N., R. 4 W., Montgomery County; flows southerly through Montgomery, Bond and Clinton counties, into Kaskaskia River in T. 1 N., R. 4 W., Clinton County; length about 79 miles; drainage area 947 square miles. Principal tributaries are: West, East, Middle and Dry Forks, and Beaver Creek. (Mississippi River Drainage.)

Shoal Creek (Dry Fork) rises in T. 7 N., R. 6 W., Macoupin County; flows southeast across the southwest corner of Montgomery County into Shoal Creek in T. 5 N., R. 4 W., Bond County; length about 15½ miles; drainage area 33 square miles. (Mississippi River Drainage.)

Shoal Creek (East Fork) rises in T. 10 N., R. 2 W., Montgomery County; flows southerly into Shoal Creek in T. 5 N., R. 4 W., Bond County; length about 39 miles; drainage area 176 square miles. (Mississippi River Drainage.)

Shoal Creek (Middle Fork) rises in T. 10 N., R. 4 W., near the northern boundary of Montgomery County; flows southerly and joins the West Fork at the southern boundary of T. 8 N., R. 4 W., same county; length about 24 miles; drainage area 144 square miles. (Mississippi River Drainage.)

Shoal Creek (West Fork) rises in T. 11 N., R. 4 W., Montgomery County; flows southerly across the county to its junction with the Middle Fork at the southern boundary of T. 8 N., R. 4 W., same county; length about 23½ miles; drainage area 156 square miles. (Mississippi River Drainage.)

Silver Creek rises in T. 7 N., R. 6 W., Macoupin County; flows southerly across Madison St. Clair counties into Kaskaskia River in T. 2 S., R. 7 W., St. Clair County, just above New Athens; length about 61 miles; drainage area 502 square miles. Principal tributaries are: East Fork, Lake Fork, Sugar Fork, Mill, Little Silver and Loop creeks. (Mississippi River Drainage.)

Silver Creek (East Fork) rises in T. 6 N., R. 5 W., Madison County; flows southwesterly into Silver Creek in T. 3 N., R. 7 W., same county; length about 22½ miles; drainage area 100 square miles. (Mississippi River Drainage.)

Silver Creek (Lake Fork) rises in eastern part of T. 3 N., R. 6 W., Madison County; flows southwesterly into Silver Creek in T. 3 N., R. 7 W., same county; length about 5½ miles; drainage area 14 square miles. (Mississippi River Drainage.)

Silver Creek (Sugar Fork) rises in T. 5 N., R. 5 W., Madison County; flows southerly into East Fork of Silver Creek in same county; length about 14 miles; drainage area 33 square miles. (Mississippi River Drainage.)

Sinsinnewa River rises in T. 2 N., R. 1 W., Grant County, Wis.; flows southerly into Mississippi River in T. 29 N., R. 2 W., JoDaviess County, Ill.; length about 16 miles; drainage area 50 square miles, of which 19 are in Illinois. (Mississippi River Drainage.)

Sixmile Creek rises in T. 5 S., R. 4 W., Pike County; flows southerly into Bay Creek in T. 7 S., R. 4 W., same county; length about 17 miles; drainage area 47 square miles. (Mississippi River Drainage.)

Sixmile Creek rises in T. 24 N., R. 3 E., McLean County; flows northwesterly into Mackinaw River in T. 25 N., R. 1 E., same county; length about 12 miles; drainage area 35 square miles. (Mississippi River Drainage.)

Skillet Fork (see Little Wabash River).

Smallpox Creek rises in T. 28 N., R. 2 E., JoDaviess County; flows southwesterly into Mississippi River in T. 27 N., R. 1 E., same county; length about 12½ miles; drainage area 34 square miles. (Mississippi River Drainage.)

Snag Creek rises in T. 27 N., R. 1 W., Woodford County; flows north and west into Crow Creek in T. 29 N., R. 3 W., Marshall County; length about 23 miles; drainage area 43 square miles. (Mississippi River Drainage.)

Solomon's Creek rises in T. 12 N., R. 8 W., Macoupin County; flows southwesterly into Otter Creek in T. 10 N., R. 9 W., same county; length about 16½ miles; drainage area 33 square miles. (Mississippi River Drainage.)

Somonauk Creek rises in T. 39 N., R. 4 E., DeKalb County; flows southerly into Fox River in T. 35 N., R. 5 E., LaSalle County; length about 28 miles; drainage area 104 square miles. (Mississippi River Drainage.)

South Kishwaukee River (see Kishwaukee River—South Branch).

South Branch (see Crow Creek).

South Branch (see Kishwaukee River).

South Fork (see Bear Creek).

South Fork (see Henderson River).
South Fork (see McGees Creek).
South Fork (see Saline River).
South Fork (see Sangamon River).
Spanker Branch (see Sugar Creek).

Spoon River has its source in the East Fork which rises in T. 15 N., R. 6 E., Bureau County; flows southerly through Stark County to the northern part of Peoria County; thence southerly to the eastern part of Knox County, continuing southerly through Knox and Fulton counties into the Illinois River in Sec. 20, T. 4 N., 4 E., at Havanna, Fulton County; length about 115 miles; drainage area 1,820 square miles. Principal tributaries are: East and West Forks, Indian, Walnut, French, Willow, Cedar and Put creeks. (Mississippi River Drainage.)

Spoon River rises in T. 22 N., R. 9 E., Champaign County; flows south into Salt Fork of Vermilion River in T. 19 N., R. 10 E., same county; length about 26 miles; drainage area 182 square miles. (Mississippi River Drainage.)

Spoon River (East Fork) rises in T. 15 N., R. 6 E., Bureau County; flows southerly to unite with the West Fork in T. 13 N., R. 6 E., Stark County; length about 14 miles; drainage area 74 square miles. (Mississippi River Drainage.)

Spoon River (Shaw's Fork) rises in T. 6 N., R. 1 W., McDonough County; flows easterly into Spoon River in T. 6 N., R. 1 E., Fulton County; length about 8 miles; drainage area 46 square miles. (Mississippi River Drainage.)

Spoon River (West Fork) rises in T. 15 N., R. 6 E., Henry County; flows easterly and southerly to unite with the East Fork in T. 13 N., R. 6 E., Stark County; length about 16 miles; drainage area 48 square miles. (Mississippi River Drainage.)

Spring Creek rises in T. 16 N., R. 2 E., Henry County; flows northerly into Green River in T. 17 N., R. 4 E., same county; length about 17 miles; drainage area 73 square miles. (Mississippi River Drainage.)

Spring Creek rises in T. 36 N., R. 12 E., Cook County; flows westerly into Hickory Creek in Sec. 15, T. 35 N., R. 10 E., Will County; length about 12 miles; drainage area 20 square miles. (Mississippi River Drainage.)

Spring Creek rises in T. 24 N., R 9 E., Ford County; flows northwesterly into Iroquois River in T. 27 N., R. 13 W., Iroquois County; length about 23 miles; drainage area 254 square miles. (Mississippi River Drainage.)

Spring Creek rises in T. 35 N., R. 1 E., LaSalle County; flows southerly into Illinois River in Sec. 2, T. 16 N., R. 11 E., Bureau County; length about 16½ miles; drainage area 48 square miles. (Mississippi River Drainage.)

Spring Creek rises in T. 15 N., R. 8 W., Sangamon County; flows northeasterly into Sangamon River in T. 16 N., R. 5 W., just below the Springfield Waterworks; length about 21 miles; drainage area 110 square miles. (Mississippi River Drainage.)

Stephen's Creek rises in T. 18 N., R. 2 E., Piatt County; flows southerly into Sangamon River in T. 16 N., R. 2 E., Macon County; length about 19 miles; drainage area 87 square miles. (Mississippi River Drainage.)

Stevens Creek rises in T. 24 N., R. 7 E., Ford County; flows southerly into Sangamon River in T. 22 N., R. 7 E., Champaign County; length about 14 miles; drainage area 79 square miles. (Mississippi River Drainage.)

Stoney Creek rises in T. 20 N., R. 11 E., Vermilion County; flows southeasterly into Salt Fork of Vermilion River in T. 19 N., R. 12 W., same county; length about 9 miles; drainage area 43 square miles. (Ohio River Drainage.)

Stoney Creek rises in T. 21 N., R. 11 W., Vermilion County; flows southerly into Vermilion River about four miles below Danville; length about 14 miles; drainage area 42 square miles. (Ohio River Drainage.)

Straddle Creek rises in T. 26 N., R. 4 E., JoDaviess County; flows southerly into Plum River in T. 25 N., R. 4 E., Carroll County; length about 13 miles; drainage area 40 square miles. (Mississippi River Drainage.)

Strawn Creek rises in T. 29 N., R. 2 W., Marshall County; flows west into Illinois River in Sec. 10, T. 29 N., R. 3 W., same county; length about 9 miles; drainage area 27 square miles. (Mississippi River Drainage.)

Sugar Creek rises in T. 23 N., R. 6 E., Ogle County; flows southwesterly into Elkhorn Creek in T. 21 N., R. 7 E., Whiteside County; length about 12 miles; drainage area 42 square miles. (Mississippi River Drainage.)

Sugar Creek rises in T. 26 N., R. 8 W., Benton County, Ind.; flows westerly to Iroquois County, Ill., thence northerly into Iroquois River at Watseka, Ill.; length about 41 miles; drainage area 533 square miles, of which 144 are in Illinois. (Mississippi River Drainage.)

Sugar Creek rises in T. 13 N., R. 12 W., Edgar County, Ill.; flows southeasterly into Wabash River in T. 12 N., R. 9 W., Vigo County, Ind.; length about 26 miles; drainage area 99 square miles. (Ohio River Drainage.)

Sugar Creek rises in T. 3 N., R. 10 E., Richland County; flows southerly into Little Wabash River in T 1 N., R. 10 E., Edwards County; length about 13½ miles; drainage area 36 square miles. (Ohio River Drainage.)

Sugar Creek rises in T. 11 S., R. 3 E., Johnson County; flows north and east into South Fork of Saline River in T. 10 S., R. 4 E., Williamson County; length about 14 miles. (Ohio River Drainage.)

Sugar Creek rises in T. 13 N., R. 7 W., Sangamon County; flows northeasterly into Sangamon River in T. 16 N., R. 4 W., about 2½ miles above Riverton; length about 31 miles; drainage area 308 square miles. (Mississippi River Drainage.)

Sugar Creek rises in T. 23 N., R. 2 E., McLean County, near Bloomington; flows southwesterly through Logan and McLean counties into Salt Creek in T. 20 N., R. 5 W., Mason County; length about 46 miles; drainage area 438 square miles. (Mississippi River Drainage.)

Sugar Creek rises in T. 3 N., R. 3 W., Schuyler County; flows southeast into Illinois River in Sec. 3, T. 1 N., R. 1 E., same county; length about 24 miles; drainage area 142 square miles. (Mississippi River Drainage.)

Sugar Creek rises in T. 7 N., R. 4 E., at the boundary between Effingham and Fayette counties; flows northwesterly into Big Creek in T. 8 N., R. 2 E., Fayette County; length about 11½ miles; drainage area 28 square miles. (Mississippi River Drainage.)

Sugar Creek rises in T. 4 N., R. 4 W., Bond County; flows southerly across Madison and Clinton counties into Kaskaskia River in T. 1 S., R. 5 W., Clinton County; length about 30 miles; drainage area 171 square miles. (Mississippi River Drainage.)

Sugar Creek (Lake Branch) rises in Sec. 29, T. 3 N., R. 4 W., flows southwesterly into Sugar Creek in Sec. 11, T. 1 N., R. 5 W., same county; length about 10½ miles; drainage area 23 square miles. (Mississippi River Drainage.)

Sugar Creek (Middle Fork) rises in T. 24 N., R. 1 E., McLean County; flows southwesterly across the southeast corner of Tazewell County into Sugar Creek in T. 22 N., R. 2 W., at the southern boundary of the county; length about 24 miles; drainage area, 71 square miles. (Mississippi River Drainage.)

Sugar Creek (Spanker Branch) rises in Sec. 6, T. 3 N., R. 4 W., Clinton County; flows southerly into Sugar Creek in Sec. 35, T. 3 N., R. 5 W., same county; length about 6½ miles; drainage area 18 square miles. (Mississippi River Drainage.)

Sugar Creek (West Fork) rises in T. 24 N., R. 1 W., McLean County; flows southerly into Sugar Creek in T. 21 N., R. 2 W., Logan County; length about 24½ miles; drainage area 81 square miles. (Mississippi River Drainage.)

Sugar Fork (see Silver Creek).

Swan Creek rises in T. 8 N., R. 3 W., Warren County; flows easterly into Cedar Creek in T. 8 N., R. 1 E., Fulton County; length about 21 miles; drainage area 100 square miles. (Mississippi River Drainage.)

Sweet Creek rises in T. 2 N., R. 8 W., Macoupin County; flows southerly into Cahokia Creek in T. 5 N., R. 7 W., Madison County; length about 14 miles. (Mississippi River Drainage.)

Taylor's Creek rises in T. 11 N., R. 9 W., Macoupin County; flows southwesterly into Macoupin Creek in T. 9 N., R. 11 W., Greene County; length about 19½ miles; drainage area 60 square miles. (Mississippi River Drainage.)

Thenius Creek rises in T. 12 N., R. 9 E., Marshall County; flows easterly into Illinois River in Sec. 13 of the same township; length about 6½ miles; drainage area 12 square miles. (Mississippi River Drainage.)

Thorn Creek rises in Sec. 31, T. 36 N., R. 14 E., Cook County; flows northerly into Little Calumet River in Sec. 24, T. 36 N., R. 14 E., same county; length about 10½ miles; drainage area 110 square miles, (Lake Michigan Drainage.)

Threemile Branch rises in T. 12 N., R. 7 E., Hardin County; flows southerly into Ohio River in same township; length about 7 miles. (Ohio River Drainage.)

Threemile Creek rises in T. 21 N., R. 9 E., Lee County; flows westerly into Rock River at the boundary line between Lee and Whiteside counties; length about 15 1/5 miles; drainage area 40 square miles. (Mississippi River Drainage.)

Tomahawk Creek rises in T. 35 N., R. 2 E., LaSalle County; flows southwesterly into Little Vermilion River in T. 34 N., R. 1 E., same county; length about 14 miles; drainage area 30 square miles. (Mississippi River Drainage.)

Trimm Creek rises in T. 33 N., R. 14 E., Will County; flows southerly into Kankakee River in T. 31 N., R. 14 E., Kankakee County; length about 15 miles; drainage area 65 square miles. (Mississippi River Drainage.)

Troublesome Creek rises in T. 5 N., R. 1 W., McDonough County; flows southwesterly into Crooked Creek in T. 4 N., R. 4 W., same county; length about 20 miles; drainage area 77 square miles. (Mississippi River Drainage.)

Turkey Creek rises in T. 26 N., R. 4 E., near northern boundary of McLean County; flows southwesterly into Mackinaw River in T. 25 N., R. 4 E., same county; length about 12½ miles; drainage area 37 square miles. (Mississippi River Drainage.)

Ursa Creek rises in T. 1 N., R. 8 W., Adams County; flows westerly into Mississippi River in T. 1 N., R. 9 W., same county; length about 11 miles; drainage area 37 square miles. (Mississippi River Drainage.)

Vermilion River has its source in the North Fork which rises in T. 26 N., R. 9 E., Ford County; flows westerly to the central part of Livingston County, thence northwest through Livingston and LaSalle counties into Illinois River in Sec. 23, T. 33 N., R. 1 E., at LaSalle; length about 89 miles; drainage area 1,320 square miles. Principal tributaries are: South Fork, Rock, Scattering Rock and Long Point creeks. (Mississippi River Drainage.)

Vermilion River has its source in the Middle Fork, which rises in T. 25 N., R. 8 and 9 E., Ford County, Ill.; flows southeasterly across Ford and Vermilion Counties, Ill.. and Vermilion County, Ind., into Wabash River in T. 18 N., R. 9 W., Vermilion County, Ind.; length about 82 miles, of which 72 miles are in Illinois; drainage area 1,435 square miles, of which 1,325 are in Illinois. Principal tributaries are: North, Salt and Middle Forks, and Stoney Creek. (Ohio River Drainage.)

Vermilion River (East Branch) rises in T. 25 N., R. 9 E., Ford County; flows south to its junction with the West Branch in T. 23 N., R. 9 E., same county; length about 13 miles; drainage area 45 square miles. (Ohio River Drainage.)

Vermilion River (Middle Fork) rises in T. 25 N., R. 8 and 9 E., Ford County, Illl.; flows southeasterly and joins the Salt Fork in T. 19 N., R. 13 E., Vermilion County, Ill.; length about 54 miles; drainage area 438 square miles. (Ohio River Drainage.)

Vermilion River (North Fork) rises in T. 26 N., R. 9 E., Ford County; flows north and west to its junction with the South Fork in T. 27 N., R. 6 E., Livingston County; length about 34 miles; drainage area 258 square miles. (Mississippi River Drainage.)

Vermilion River (Salt Fork) rises in T. 21 N., R. 8 E., Champaign County; flows southerly to T. 18 N., R. 10 E., same county, thence west to its junction with Middle Fork in T. 19 N., R. 13 E., Vermilion County; length about 48 miles; drainage area 506 square miles. Principal tributaries are: Spoon River and Stoney Creek. (Ohio River Drainage.)

Vermilion River (South Fork) rises in T. 25 N., R. 8 E., Livingston County; flows northwesterly to unite with the North Fork in T. 27 N., R. 6 E., same county; length about 21 miles; drainage area 188 square miles. (Mississippi River Drainage.)

Vermilion River (West Branch) rises in T. 25 N., R. 8 E., Ford County; flows south to its junction with East Branch in T. 23 N., R. 9 E., same county; length about 14 miles; drainage area 74 square miles. (Ohio River Drainage.)

Village Creek rises in T. 1 S., R. 10 E., Edwards County; flows westerly into Little Wabash River in T. 1 S., R. 9 E., Wayne County; length about 9 miles; drainage area 31 square miles. (Ohio River Drainage.)

Walbridge Creek rises in T. 34 N., R. 5 E., LaSalle County; flows south into Illinois River in Sec. 14, T. 33 N., R. 4 E., same county; length about 7¼ miles; drainage area 7 square miles. (Mississippi River Drainage.)

Walnut Creek rises in T. 27 N., R. 3 W., Woodford County; flows southerly into Mackinaw River in T. 25 N., R. 1 W., same county; length about 20 miles; drainage area 72 square miles. (Mississippi River Drainage.)

Walnut Creek rises in T. 13 N., R. 2 E., Henry County; flows southeasterly into Spoon River in T. 11 N., R. 4 E., Knox County; length about 24 miles; drainage area 160 square miles. (Mississippi River Drainage.)

Walnut Creek rises in T. 1 N., R. 4 W., Brown County; flows southeasterly into McGees Creek in T. 2 S., R. 5 W., same county; length about 11 miles; drainage area 35 square miles. (Mississippi River Drainage.)

Walnut Creek rises in T. 15 N., R. 11 W., Morgan County; flows westerly into Big Sandy Creek in Sec. 17, T. 13 N., R. 13 W., Scott County; length about 19 miles; drainage area 73 square miles. (Mississippi River Drainage.)

Waupecan Creek rises in T. 31 N., R. 5 E., at the eastern boundary of LaSalle County; flows northeasterly into Illinois River in Sec. 7, T. 31 N., R. 7 E., Grundy County; length about 17 miles; drainage area 44 square miles. (Mississippi River Drainage.)

West Branch (see Forked Creek).
West Branch (see Great Pierce Creek).
West Branch (see Richland Creek).
West Branch (see Vermilion River).
West Fork (see Au Sable Creek).
West Fork (see DuPage River).
West Fork (see Kickapoo Creek).
West Fork (see Mazon River).
West Fork (see Shoal Creek).
West Fork (see Spoon River).
West Fork (see Sugar Creek).

West Bureau Creek rises in T. 18 N., R. 9 E., Bureau County; flows southwest into Big Bureau Creek in T. 16 N., R. 8 E., same county; length about 22½ miles; drainage area 124 square miles. (Mississippi River Drainage)

West Okaw Creek rises in T. 16 N., R. 4 E., Piatt County; flows southerly through Moultrie County and into Kaskasia River in T. 13 N., R. 5 E., near the southern boundary of the county; length about 29 miles; drainage area 215 square miles. (Mississippi River Drainage.)

White Oak Creek rises in Sec. 26, T. 8 S., R. 7 E., Saline County; flows easterly into North Fork of Saline River in Sec. 15, 8 S., R. 8 E., same county; length about 7¾ miles; drainage area 12 square miles. (Ohio River Drainage.)

Wildcat Slough rises in T. 22 N., R. 9 E., Champaign County; flows southwesterly into Sangamon River in T. 21 N., R. 7 E., same county; length about 13½ miles; drainage area 24 square miles. (Mississippi River Drainage.)

William Creek rises in T. 3 N., R. 5 W., Hancock County; flows northeasterly into Flower Creek in T. 3 N., R. 4 W., Schuyler County; length about 11 miles; drainage area 29 square miles. (Mississippi River Drainage.)

Willow Creek rises in T. 38 N., R. 3 E., DeKalb County; flows westerly into Green River in T. 21 N., R. 11 E., Lee County; length about 14 miles; drainage area 55 square miles. (Mississippi River Drainage.)

Willow Creek rises in T. 8 N., R. 4 E., Fulton County; flows northwesterly to Knox County, thence westerly into Spoon River in T. 9 N., R. 2 E., near the southern boundary; length about 15 miles; drainage area 37 square miles. (Mississippi River Drainage.)

Willow Creek rises in T. 16 N., R. 12 W., Morgan County; flows westerly into Illinois River in Sec. 10, T. 16 N., R. 13 W., same county; length about 8½ miles. (Mississippi River Drainage.)

Willow Creek rises in T. 10 N., R. 13 W., Clark County; flows southerly into North Fork of Embarras River in T. 7 N., R. 14 W., Crawford County; length about 23 miles; drainage area 90 square miles. (Ohio River Drainage.)

Wilson Creek rises in T. 4 N., R. 1 E., Fulton County; flows southeast into Illinois River in T. 2 N., R. 4 E., Schuyler County; length about 7 miles. (Mississippi River Drainage.)

Wolf Creek rises in T. 18 N., R. 4 W., Logan County; flows southerly into Sangamon River in T. 17 N., R. 4 W., same county; length about 13 miles; drainage area 43 square miles. (Mississippi River Drainage.)

Wolf Creek rises in T. 10 N., R. 5 E., Shelby County; flows southwesterly into Kaskaskia River in T. 8 N., R. 2 E., Fayette County; length about 19 miles; drainage area 81 square miles. (Mississippi River Drainage.)

Wolf Run rises in T. 12 N., R. 11 W., Greene County; flows southerly into Apple Creek in T. 11 N., R. 11 W., same county; length about 10 miles. (Mississippi River Drainage.)

Yellow Creek rises in T. 28 N., R. 5 E., Stephenson County; flows easterly into Pecatonica River in T. 27 N., R. 8 E., same county; length about 32 miles; drainage area 190 square miles. (Mississippi River Drainage.)

DRAINAGE AREAS OF ILLINOIS STREAMS

UPPER MISSISSIPPI RIVER DRAINAGE

(Total in Illinois, 44,050 square miles.)

	Map used	Drainage area
		Sq. miles
Sinsinnewa River—		
In Illinois	B	19
In Wisconsin	T. S.	31
Total above mouth		50
Galena River—		
In Illinois	B	52
In Wisconsin	T. S.	145
Total above mouth		197
Fever Creek—		
In Illinois	B	16
In Wisconsin	T. S.	3
Total above mouth		19
Smallpox Creek	B	34
Apple River—		
In Illinois	B	246
In Wisconsin	T. S.	24
Total above mouth		270
Mill Creek	B	40
Rush Creek	B	93
Plum River	B	307
Plum Creek	B	90
Straddle Creek	B., T. S	40
Carroll Creek	B	55
Otter Creek	B	31
Rock River—		
In Illinois	B	5,310
In Wisconsin	P. R.	5,510
Total above mouth		10,820
Gaging station above mouth of Pecatonica River	B., P. R.	3,680
Gaging station below mouth of Pecatonica River	B., P. R.	6,290
Gaging station at Nelson	B., P. R.	8,620
Gaging station at Sterling	B., P. R.	8,740
Pecatonica River—		
In Illinois	B	780
In Wisconsin	P. R.	1,830
Total above mouth		2,610
Richland River—		
In Illinois	B	79
In Wisconsin	P. R.	58
Total above mouth		137
Yellow Creek	B	190
Rock Run	B	89

UPPER MISSISSIPPI RIVER DRAINAGE—*Continued*

	Map used	Drainage area
Rock River—*Concluded*		*Sq. miles*
Sugar River—		
In Illinois	B	69
In Wisconsin	P. R.	663
Total above mouth		732
Otter Creek	B	56
Kinnikinnick Creek	B	28
Kishwaukee River—		
In Illinois	B	1,190
In Wisconsin	P. R.	2
Total above mouth		1,192
North Branch	B	40
Rush Creek	B	42
Coon Creek	B	126
Piscasaw River	B	111
Beaver Creek	B	64
South Branch (or South Kishwaukee River)	B	412
Kilbush Creek	B	218
Leaf River	B	112
Kyte River	B	225
Pine Creek	B	60
Threemile Creek	B	40
Fivemile Creek	B	66
Elkhorn Creek	B	249
Sugar Creek	B	42
Rock Creek	B	215
Otter Creek	B	27
Green River	B	1,000
Willow Creek	B	55
Mud Creek	B	269
Hickory Creek	B	167
Coal Creek	B	99
Spring Creek	B	73
Mill Creek	B	73
Copper Creek	B	76
Eliza Creek	B	73
Edwards River	B	446
Camp Run	B	50
Camp Creek	B	58
Pope Creek	B	167
Henderson River	B	598
Middle Henderson Creek	B	167
Little Henderson Creek	B	35
Duck Creek	B	18
Cedar Creek	B	163
South Fork	B	71
Ellison Creek	B	112
Honey Creek	B	82
Camp Creek	B	35
Clancy Creek	B	30
Bear Creek	B	345
South Fork	B	144
Hog Branch	B	29
Big Neck Creek	B	29
Ursa Creek	B	37
Rock Creek	B	30
Mill Creek	B	84
Fall Creek	B	96
McCraney Creek	B	48
Hadley Vreek	B	84
Kiser Creek	B	86
Bay Creek	B	222
Honey Creek	B	40
Sixmile Creek	B	47
Illinois River—		
In Illinois	B	23,940
In Wisconsin	P. R.	1,020
In Indiana	P. R.	3,140
Above gaging station, near Minooka	B	6,660
Above gaging station, near Seneca	B	7,680
Above gaging station, near Ottawa	B	9,440

UPPER MISSISSIPPI RIVER DRAINAGE—*Continued*

	Map used	Drainage area
		Sq. Miles
Illinois River—*Continued*		
Above gaging station, near LaSalle	B	11,050
Above gaging station, near Peoria	B	12,680
Above gaging station, near Havana	B	16,670
Total above mouth		28,100
Desplaines River—		
In Illinois	B	1,240
In Wisconsin	P. R.	126
Total above mouth		1,366
Above gaging station at Riverside	B	573
Gaging station above mouth of Jackson Creek	T. S., B	996
Above gaging station near Channahon	T. S., B	1,356
Indian Creek	B	26
Flag Creek	T. S.	19
Salt Creek	T. S., B	170
Long Run	T. S.	27
Fraction Run	T. S.	6
Hickory Creek	T. S., B	98
Spring Creek	T. S.	20
Rock Run	T. S.	13
Cedar Creek	T. S.	12
Jackson Creek	B	58
Grant Creek	T. S.	14
DuPage River	B	326
West Branch	T. S.	106
East Branch	T. S.	84
Buffalo Creek	T. S.	39
Kankakee River—		
In Illinois	B	2,140
In Indiana	P. R.	3,140
Total above mouth		5,280
Above Momence, Ill		3,260
Trim Creek	B	65
Exline Slough	B	62
Iroquois River—		
In Illinois	B	1,240
In Indiana	P. R.	935
Total above mouth		2,175
Sugar Creek		533
Mud Creek	B	225
Spring Creek	B	254
Prairie Creek	B	100
Longum (Longham) Creek	B	115
Beaver Creek	B	179
Rock Creek	B	107
Black Walnut Creek	B	58
Horse Creek	B	148
Forked Creek	B	151
West Branch	B	61
Jordan Creek	B	26
Prairie Creek	B	64
AuSable Creek	B	283
East Fork	B	56
West Fork	B	37
Middle Fork	B	38
Mazon River	B	548
East Fork	B	253
Gooseberry Creek	B	45
West Fork	B	170
Brewster's Sluice	B	52
Johnny Run	B	50
Clay Pool Creek	T. S.	39
Nettle Creek	T. S.	70
Sarratoga Creek	T. S.	22
Waupecan Creek	B	44
Bill's Run	B	35
Hog Run	B	23
Walbridge Creek	T. S.	7

UPPER MISSISSIPPI RIVER DRAINAGE—*Continued*

	Map used	Drainage area
		Sq. Miles
Illinois River—*Continued*		
Fox River—		
Gaging station at Sheridan	B	2,190
Gaging station at Ottawa	B	2,580
In Illinois	B	1,680
In Wisconsin	P. R.	900
Total above mouth		2,580
Mill Creek	B	20
Blackberry Creek	B	65
Rock Creek (or Big Rock Creek)	B	84
Little Rock Creek	B	55
Somonauk Creek	B	104
Big Indian Creek (or Indian Creek)	B	277
Little Indian Creek	B	85
Buck Creek	T. S., B	43
Covel Creek	B	62
Pecumsaugum Creek	T. S.	33
Vermilion River	B	1,320
North Fork	B	258
Fivemile Creek	B	99
South Fork	B	188
Rock Creek	B	128
Pike Creek	B	40
Scattering Rock Creek	B	68
Mud Creek	B	57
Long Point Creek	B	96
Little Vermilion River	B	124
Tomahawk Creek	T. S., B	30
Spring Creek	B	48
Negro Creek	T. S.	28
Allforks Creek	T. S.	27
Big Bureau Creek	B	502
West Bureau Creek	B	124
East Bureau Creek	T. S.	104
Brush Creek	T. S.	40
Sandy Creek	B	135
Crow Creek (west side)	B	106
Thenius Creek	T. S.	12
Strawn Creek	T. S.	27
Babb Creek	T. S.	9
Crow Creek (east side)	B	180
South Fork	B	73
North Fork	B	43
Snag Creek	T. S.	43
Senachwine Creek	B	96
Henry Creek	T. S.	20
Richland Creek	T. S., B	51
Black Partridge (or Partridge) Creek	T. S.	29
Kickapoo Creek	B	303
West Fork	B	77
Lamarsh Creek	T. S., B	45
Mackinaw River	B	1,200
Henline Creek	B	41
Turkey Creek	B	37
Money Creek	B	60
Sixmile Creek	B	35
Panther Creek	B	177
East Branch	B	77
Walnut Creek	B	72
Rock Creek	B	32
Mud Creek	B	58
Little Mackinaw River	B	53
Dillon Creek	B	36
Lost Creek	B	29
Copperas Creek	B	42
Quiver Creek	B	164
Spoon River—		
Above Wyoming	G	200
Above Elmore	G	440
Above Dahinda	B	638
Above Maquon	G	810
Above London Mills	G	1,040
Above Seville	B	1,610
Above Duncan Mills	G	1,770

UPPER MISSISSIPPI RIVER DRAINAGE—*Continued*

	Map used	Drainage area
		Sq. miles
Illinois River—*Continued*—		
Spoon River—*Concluded*—		
Above mouth	B	1,820
East Fork	B	74
West Fork	B	48
Indian Creek	B	75
Walnut Creek	B	160
Foreman Creek	B	23
Court Creek	B	75
French Creek	B	69
Willow Creek	B	37
Cedar Creek	B	296
Swan Creek	B	100
Nigger Creek	B	45
Coal Creek	B	48
Put Creek	B	105
Shaw's Fork	B	46
Potato Creek	B	31
Big Creek	B	30
Otter Creek	B	90
Sangamon River—		
Above gaging station near Monticello	B	550
Above gaging station at Decatur	B	791
Above gaging station at Springfield	B	2,670
Above gaging station at Riverton	B	2,560
Above gaging station near Oakford	B	5,000
Above Chandlerville	B	5,280
Above mouth	B	5,390
Steven's Creek	B	79
Wildcat Slough	B	24
Camp Creek	B	43
Goose Creek	B	72
Flint Creek	B	104
Stephen's Creek	B	87
Mosquito Creek	B	69
Buckhart Creek	B	105
South Fork—		
Above gaging station near Taylorville	B	427
Above mouth	B	817
Flat Branch	B	283
Lake Fork	B	32
Bear Creek	B	59
Horse Creek	B	125
Sugar Creek	B	308
Lick Creek	B	162
Wolf Creek	T. S.	43
Fancy Creek	T. S.	40
Spring Creek	B	110
Richland Creek	T. S.	93
Prairie Creek	T. S.	46
Rock Creek	T. S.	18
Salt Creek—		
Above gaging station near Kenney	B	459
Above mouth	B	1,940
North Fork	B	138
Lake Fork	B	279
Jones Fork	B	71
Deer Creek	B	78
Kickapoo Creek	B	337
Sugar Creek—		
Above Hartsburg	G	320
Above mouth	B	438
Middle Fork	B	71
West Fork	B	81
Prairie Creek	B	92
Pike Creek	B	24
Crane Creek	B	121
Sugar Creek	B	142
Crooked Creek	B	1,350
Pilot Grove Creek	B	28
LaHarpe Creek	B	96
Rock Creek	B	30
Long Creek	B	27
Cedar Creek	B	31
Middle Creek	B	23
East Branch	B	139
Brown Creek	B	57

UPPER MISSISSIPPI RIVER DRAINAGE—*Continued*

	Map used	Drainage area
		Sq. Miles
Illinois River—*Continued*—		
Sugar Creek—*Continued*—		
Panther Creek	B	35
Troublesome Creek	B	77
Camp Creek	B	126
Grindstone Creek	B	62
Flower Creek	B	63
William Creek	B	29
Little Missouri Creek	B	94
Indian Creek	B	227
Coon Run	B	45
McGee's Creek	B	437
Walnut Creek	B	35
Fishhook Creek	B	24
Middle Fork	B	82
South Fork	B	26
Mauvaise Terre Creek	B	193
Big Blue River	B	50
Walnut Creek	B	41
Plum Creek	B	25
Big Sandy Creek	B	254
Hurricane Creek	B	41
Apple Creek	B	435
Big Apple Creek	B	28
Little Apple Creek	B	26
Coal Creek	B	40
Bear Creek	B	30
Macoupin Creek	B	989
Hurricane Creek	B	48
Otter Creek	B	221
Massac Creek	B	33
Solomon's Creek	B	33
Joe's Creek	B	33
Taylor's Creek	B	60
Phill's Creek	B	66
Dorsey Branch	B	26
Otter Creek	B	90
Piasa Creek	B	101
Cahokia Creek—		
Above gaging station near Poag	*	259
Above mouth	*	360
Indian Creek	B	40
Fountain Creek	B	65
Kaskaskia (or Okaw) River—		
Above gaging station near Arcola	B	390
Above gaging station at Shelbyville	B	1,030
Above gaging station at Vandalia	B	1,980
Above gaging station at Carlyle	B	2,680
Above gaging station at New Athens	B	5,220
Above mouth	B	5,830
Lake Fork	B	206
Flat Branch	B	38
Apple Creek	B	57
West Okaw Creek	B	215
Sand Creek	B	28
Robinson Creek	B	110
Jordan Creek	B	29
Richland Creek	B	94
Brush Creek	B	26
Wolf Creek	B	81
Mitchell Creek	B	214
Beck's Creek	B	132
Opossum Creek	B	40
Big Creek	B	79
Sugar Creek	B	28
Booz Creek	B	115
Camp Creek	B	23
Hickory Creek	B	122
Sand Creek	B	24
Hurricane Creek	B	167
East Fork	B	249
Bear Creek	B	99
Crooked Creek	B	473
Coon Creek	B	36
Lost Creek	B	87
Little Crooked Creek	B	102

UPPER MISSISSIPPI RIVER DRAINAGE—*Concluded*

	Map used	Drainage area
		Sq. Miles
Illinois River—*Concluded*—		
Shoal Creek—		
Above gaging station near Breese	B	780
Above mouth	B	947
West Fork	B	156
Middle Fork	B	144
Dry Fork	B	33
East Fork	B	176
Beaver Creek	B	162
Flat Branch	B	24
Sugar Creek	B	171
Spanker Branch	T. S.	18
Lake Branch	T. S.	22
Elkhorn Creek	B	91
Mud Creek	B	114
Silver Creek—		
Above gaging station near Lebanon	B	335
Above mouth	B	502
East Fork	B	100
Sugar Fork	B	33
Lake Fork	T. S.	14
Mill Creek	T. S.	12
Ogles Creek	T. S.	16
Little Silver Creek	T. S.	48
East Branch	T. S.	14
Loop Creek	B	30
Richland Creek	B	233
West Branch	B	27
Prairie du Long Creek	B	87
Plum Creek	B	98
Horse Creek	B	62
Mary's River	B	196
Little Mary's River	B	60
Big Muddy River—		
Above gaging station near Cambon	B	735
Above mouth	B	2,390
Rayse Creek	B	69
Casey Fork	B	160
Middle Fork	B	217
Ewing Creek	T. S.	60
Pond Creek	T. S.	104
Lake Creek	T. S.	35
Little Muddy River	B	290
Reese Creek	B	38
Crab Orchard Creek	B	372
Derry's Creek	B	61
Beaucoup Creek—		
Gaging station near Pinckneyville	B	227
Above Vergennes	G	460
Above mouth	B	564
Galum Creek	B	150
Little Galum Creek	B	27
Pipestone Creek	B	27
Rattlesnake Creek	T. S.	11
Kinkaid Creek	B	78
Cedar Creek	B	44
Clear Creek	B	131

* From map of the East Side Levee and Sanitary District.

OHIO RIVER DRAINAGE BASIN

(Total in Illinois, 11,500 square miles.)

	Map used	Drainage area
		Sq. miles
Wabash River—		
In Illinois	B	8,770
Vermilion River—		
In Illinois	B	1,325
In Indiana	P. R.	110
Total above mouth		1,435
Middle Fork	B	438
East Branch	B	45
West Branch	B	74
Salt Fork	B	506
Spoon River	B	182
Stoney Creek	B	43
North Fork—		
In Indiana	P. R.	61
In Illinois	B	233
Total above mouth		294
Stoney Creek	T. S.	42
Little Vermilion River—		
In Indiana	P. R.	34
In Illinois	B	179
Total above mouth		213
Bruellett's Creek—		
In Indiana	P. R.	40
In Illinois	B	262
Total above mouth		302
North Fork	B	104
Sugar Creek—		
In Indiana	P. R.	27
In Illinois	B	72
Total above mouth		99
Clear Creek—		
In Indiana	P. R.	6
In Illinois	B	40
Total above mouth		46
Big Creek	B	111
Mill Creek	B	147
Embarras River—		
Above gaging station near Oakland	B	535
Above gaging station near St. Marie	B	1,540
Above Lawrenceville	B	2,320
Above mouth	B	2,400
Scattering Fork	B	127
Brushy Fork	B	120
Brush Creek	B	82
Riley Creek	B	108
Kickapoo Creek	B	45
Hurricane Creek	B	45
Lost Creek	B	27
Cottonwood Creek	B	152
Range Creek	B	44
Crooked Creek	B	111
North Fork	B	320
Willow Creek	B	90
Maple Creek	B	28
Big Creek	B	110
Dogwood Creek	B	26
Honey Creek	B	38
Muddy Creek	B	93
Raccoon Creek	B	68
Bon Pas Creek	B	258
Little Bon Pas Creek	B	57

OHIO RIVER DRAINAGE BASIN—*Concluded*

	Map used	Drainage area
		Sq. miles
Wabash River—*Concluded*		
Little Wabash River—		
Above gaging station near Clay City	B	808
Above gaging station near Golden Gate	B	1,780
Above gaging station near Carmi	B	3,090
Above mouth	B	3,190
Green Creek	B	60
Big Creek	B	20
Fulfer Creek	B	38
Salt Creek	B	98
Little Salt Creek	B	28
Bishop Creek	B	67
Lucas Creek	B	22
Dismal Creek	B	55
Crooked Creek	B	36
Panther Creek	B	29
Buck Creek	B	26
Muddy Creek	B	304
Law's Creek	B	56
Hurricane Creek	B	34
Little Muddy Creek	B	62
Fox River	B	156
Sugar Creek	B	36
Village Creek	B	31
Elm Creek	B	261
Raccoon Creek	B	72
Deer Creek	B	57
Pond Creek	B	30
Skillet Fork—		
Above gaging station near Wayne City	B	481
Above gaging station near Mill Shoals	B	912
Above mouth	B	1,080
Brush Creek	B	51
Horse Creek	B	125
Dry Fork	B	76
Haw Creek	B	167
Saline River	B	1,130
North Fork	B	472
Contrary Creek	B	61
Rector Creek	B	81
Bear Creek	B	122
Indian Creek	T. S.	12
Cane Creek	T. S.	80
White Oak Creek	T. S.	12
Crawford Creek	T.	11
South Fork	B	527
Middle Fork	B	246
Halltown Creek	T	6
Bankston Creek	B	88
Brushy Creek	B	22
Big Creek	B	.47
Great Pierce Creek	B	84
Lusk Creek	B	70
Big Bay Creek	B	275
Massac Creek	B	33
Cache River	B	622
East Branch	B	94
Big Cypress Creek	B	65
Big Creek	B	41
Mill Creek	B	85

LAKE MICHIGAN DRAINAGE BASIN

(Total in Illinois, 722 square miles.)

	Map used	Drainage area
		Sq. miles
Chicago River	T. S.	226
North Branch	T. S.	123
South Branch	T. S.	92
Grand Calumet River	T. S., P. R.	689
Little Calumet River	T. S., P. R.	606
Deep River	B	155
Thorne Creek	B	110

APPENDIX

DEVELOPED WATER POWER AND DRAINAGE DISTRICTS OF ILLINOIS

By George B. Hills

PART I—DEVELOPED WATER POWER

PREPARATION OF REPORT

The collecting and compilation of data relative to the developed water power in Illinois was carried on by the Rivers and Lakes Commission in 1911 and 1912. Letters were first sent to each county and township clerk asking at what points water power was being developed. Forms asking for the following information were sent to the parties interested in each plant located:

Name of corporation, partnership or individual operating plant.
Postoffice County State

1. Date of charter.
2. Date of construction.
3. Dates of important changes in construction and details.
4. Capital stock.
5. Dates of changes of forms of ownership.
6. Name of stream on which plant is located.
7. To what large river is this stream tributary?
8. Location of plant, accompanied, if possible, by a plan, sketch or photograph showing features of plant, location and topography.
9. Name of mill or power station.
10. Drainage area of stream above dam, accompanied by map of same, if possible ..... square miles.
    A. Nature of topography.
11. Have any records of height of water been kept?
12. What discharge measurements have been made in this locality? By whom?
13. Dam.
    A. Height.....feet. B. Length.....feet.
    C. Width.....feet. D. Material.....
    E. Capacity of reservoir.....cubic feet. Cost.....
    F. Area flooded.....square miles. If possible submit map showing property lines.
    G. Leakage.....cubic feet per second.
    H. Elevation of crest.....
    L. Owner of dam.....
14. Canal.
    A. Method of supplying water to wheels.....
    B. Operating capacity of canal or pipe line, or approximate dimensions.

15. Plant.
A. Nature of product.....
B. Quantity and value.....
C. Waterwheels and turbines.....
a. Size and number.....
b. Total rated capacity.....horsepower.
c. Head under which they operate....feet. Range....feet.
d. Horsepower developed during average low water.

Number of wheel	Kind of wheel	Name of maker	Size of wheel—inches	Usual gate opening—inches	Rated power at usual gate and head	Discharge cubic feet per second
1.						
2.						
3.						

D. Water wheel governors (automatic or otherwise, make):
E. Generators:

Number	Make	Kilowatts	Voltage	Phase	Current	Connection	Remarks
1.							
2.							
3.							
4.							

F. Is power transmitted?..... Where.....
How much .....
For what purpose.....
Market price of power.....

16. Transmission lines (location, length, voltage, size of wire, kind of poles, etc.)

.....

17. Operation of plant.
A. Hours of daily run.... B. Number of days per week....
C. Do you store water when not running.....
D. How long do you operate auxiliary steam plant.....
Horsepower.....

18. Storage.
A. Do you have the benefit of additional important storage.....
B. Location of storage dam.....
C. Owner of dam.....
D. Is operation of dam satisfactory.....
E. Remarks on operation of storage dam.....

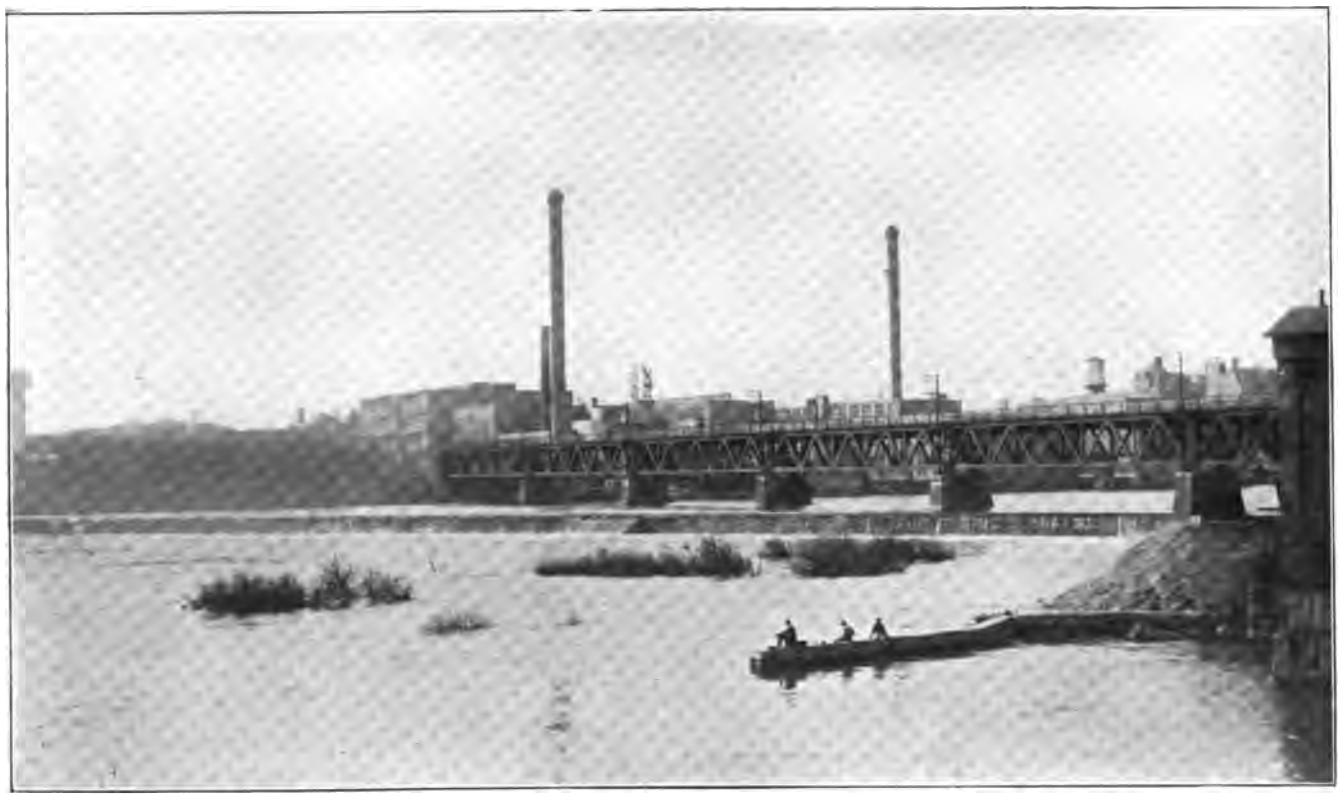
19. Names and addresses of other water plants in vicinity.

20. Additional remarks. (If possible, furnish picture of plant.)
Information furnished by.....

Where it was impossible to obtain the desired information by mail from any plant, it was visited by one of the engineers connected with this office.

The information collected has been compiled in the table which follows. Table No. 1 gives the principal facts relative to the different plants arranged by rivers in the following order: The Mississippi River heads the list, and the plants on it are listed in descending order, beginning with those nearest

PLATE V

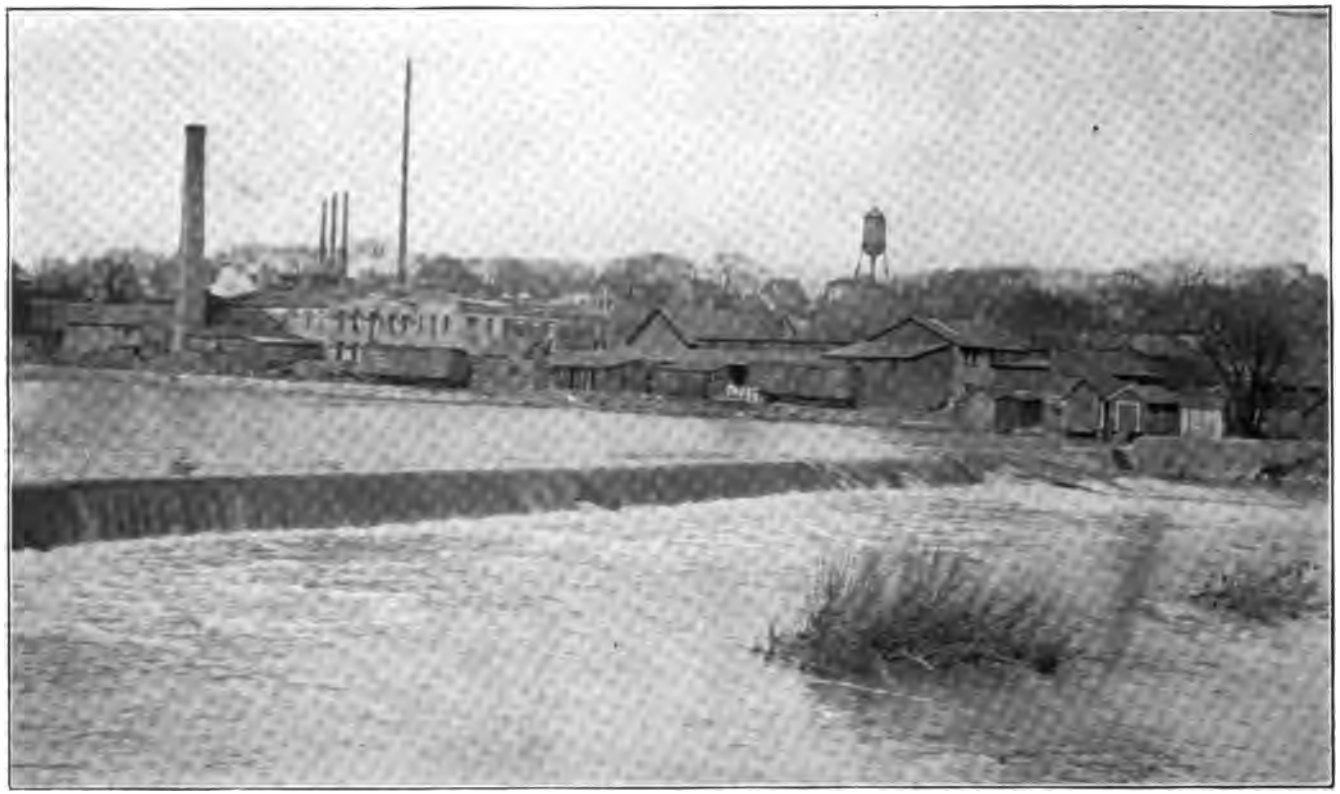


Dam at Rockford, Rock River

PLATE VI

Fox River at Algonquin

PLATE VII



Dam on Fox River at St. Charles

the source. Those streams discharging directly into the Mississippi are then arranged in the same sequence. The plants on these streams are also arranged in descending order. The same arrangement is observed in streams emptying into the tributaries of the Mississippi.

In preparing this table, no measurements were taken, and other than a check with the published rating tables of the various turbine manufacturers, the statements of operators for average actual horsepower developed were accepted. It was requested that these statements be based on years of normal flow.

It was not found practicable to distinguish in the table between horsepower developed for a part of a day or for twenty-four continuous hours.

Table No. 1

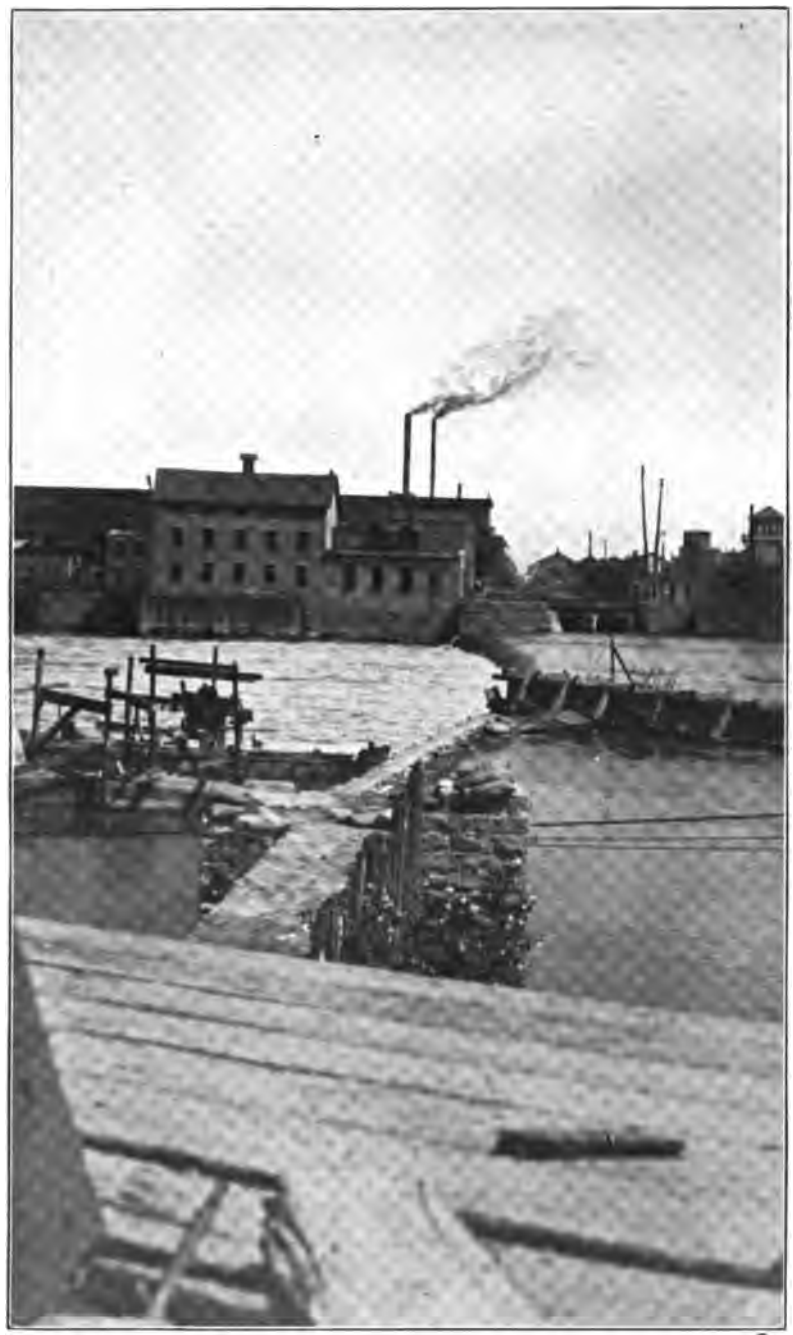
Location	Average working head	Average H. P. developed	Product	Average annual value product—dollars	Auxiliary plant	Average operation per year—mos.	Remarks
MISSISSIPPI RIVER							
Rock Island	9½	3,640	Electricity			10	
Rock Island	10	2,600	..do	145,000	No	10	Government arsenal
GALENA RIVER (MISSISSIPPI)							
Millbrig	20	45	Grist mill	2,000	No	12	Two hundred and fifty H. P. possible
APPLE RIVER (MISSISSIPPI)							
Elizabeth	5½	20	Grist mill	10,000	No	11	Built in 1846
Hanover	15	225	Woolen goods	80,000	125	9	
ROCK RIVER (MISSISSIPPI)							
Rockton	12	500	Milling and building paper	110,000	285	11½	Claim 5,000 H. P. possible
Rockford	7½	3,000	General manufacturing	2,000,000	Yes	10	Represents fifteen plants
Oregon	6	400	Electricity		Yes	9	
Dixon	7	800	..do		Yes	9	
Sterling and Rock Falls	8	3,000	General manufacturing	2,000,000	Yes	11	Represents eleven plants
Sears	13	2,600	Electricity	150,000	No		Duplicate installation contemplated
PECATONICA RIVER (ROCK)							
Freeport	6	400	Electricity	40,000		10	"Goddard's Dam"
Freeport	6	70	Grist mill		Yes	10	
Ridott	6	300		30,000	No	10	"Brown's Mill"
RICHLAND CREEK (PECATONICA)							
Orangeville	8	40	Grist mill and electricity		No	11	"Orangeville Mill"
KISHWAUKEE RIVER (ROCK)							
Belvidere	6	60	Grist mill		Yes	10	"Baltic Mills"
Cherry Valley	8	90	Mill and electricity		No	12	Built in 1840
PISKASAW CREEK (KISHWAUKEE)							
Belvidere	12	35	Casket hardware		Yes	11	"Big Thunder Mills"
LEAF RIVER (ROCK)							
Leaf River	9	12	Grist mill		No	11	"Leaf River Mills"
ELKHORN CREEK (ROCK)							
Milledgeville	5½	20	Grist mill		No	12	"Fremont Mills"
Polo	6½	25	Saw mill		No	11	"Victor Mills" built in 1836

ROCK CREEK (ROCK)							
Morrison	9	15	Grist mill		No	11	"Apples Mill"
Morrison	8	25	Flour and feed		No	12	"Unionville Mills"
ILLINOIS RIVER							
Marseilles	11	900	Paper and paper cartons	1,386,000	800	10–12	
Marseilles	10	450	Cereal board and paper	225,000	650	10–12	
Marseilles	11	2,200	Felt, roofing paper	3,000,000	None	10–12	
Marseilles	11	120	Harvesting machinery		None	10–12	
Marseilles	11	3,774	Electricity	60,000	None	10–12	
Marseilles	11	430	Express and wrapping paper	120,000	None	10–12	
DESPLAINES RIVER (ILLINOIS)							
Riverside							No mechanical installation
Joliet	8½	7,518	Electricity	300,000	1,080	4½	
SALT CREEK (DESPLAINES)							
Hinsdale	6	75	Feedmill	4,000	75	7	
CHICAGO DRAINAGE CANAL							
Lockport	34	26,800	Electricity		None	12	
KANKAKEE RIVER							
Kankakee	8½	1,070	Electricity	50,000		9	To be abandoned
Kankakee	8½	928	..do			9	Under construction
Wilmington	8	220	..do		Yes	9	
FOX RIVER (ILLINOIS)							
Carpentersville	6	427	Iron and steel articles	2,000,000	500	7	
Elgin	7	842	Dairy products, manufacturing	750,000	485	8	Nineteen plants
South Elgin	7	351	Crude drugs	100,000	None	12	
St. Charles	7	402	General manufacturing		None	12	Four plants
Geneva	4½	205	Glucose, mill, sad irons	200,000	60	10	Three plants
Batavia	9½	500	Wagons, windmills and foundry	1,700,000	435	10	Four plants
NIPPERSINK CREEK (FOX)							
Ringwood	8	50	Feedmill	2,000	None	12	
Richmond	11	50	..do	2,500	None	12	
Woodstock	10	18	..do	2,000	15	6	
PECUMSANG CREEK (ILLINOIS)							
Utica	16	14	Electricity		None	10	Private plant on farm
VERMILION RIVER (ILLINOIS)							
Pontiac	6	30	Feedmill	3,500	None	9	
SPOON RIVER (ILLINOIS)							
Bernadotte	8	90	Feedmill		None	11	Closed
Breckenridge	5	40	..do	2,500	None	12	
Custer	8	50	..do	2,000	None	12	

TABLE 1—*Concluded*

Location	Average working head	Average H. P. developed	Product	Average annual value product—dollars	Auxiliary plant	Average operation per year—mos.	Remarks
SUGAR CREEK (ILLINOIS)							
McLean	4½	12	Feedmill	1,000	None	9	
SALT CREEK (ILLINOIS)							
Kenney	4	12	Feedmill	1,000	None	8	
LAMOINE RIVER (ILLINOIS)							
Brooklyn	4	25	Feedmill	3,500	None	11	
BEDFORD SPRINGS (ILLINOIS)							
Bedford	22	.....	Gristmill	.....	None	11	Run by water from springs.. A 29′ x 3′4″ over shot wheel
VERMILION RIVER (WABASH)							
Alvin	4	4	Gristmill	2,000	None	12	
Marshall	6	12	..do	2,000	None	8	Gideon Mills

PLATE VIII



Water power development at Kankakee

Mill at Pontiac, Vermilion River

Mill at Pontiac, Vermilion River

PLATE X

"Greenwood Mills" Nippersink Creek, near Woodstock

PLATE XI

Abandoned mill near Old Council Hill

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DESCRIPTION OF SOME OF THE TYPICAL PLANTS

ROCK RIVER AT SEARS

Among the plants of most recent and modern construction is that on the Rock River near its mouth. A concrete dam provides an avèrage head of 13 feet, which is decreased at times by back water from the Mississippi. The mechanical installation consists of 6, 69″ water turbines, each driving a 2400 V. 300 K.W. A.C. umbrella type generator at 72 R.P.M., and one 57″ turbine, driving a 150 K.W. exciter unit. The water is led to the wheels through a head race of such dimensions as to provide a current of less than two feet per second. The power plant provides capacity for duplication of the present installation. The average output for a 13′ head is about 2300 H.P. used in the operation of electric cars.

ROCK RIVER AT ROCKFORD

The method of development and the use of power at Rockford, Ill., is the same as that employed at Elgin, Aurora, Marseilles and some other manufacturing towns. A dam is built across the river by a corporation receiving the right from the proper authorities. The water is diverted from above the dam into raceways extending along the river bank on either side. The total flow is usually divided into a certain number of parts or shares. The different manufacturers interested in the power are located along the raceway, drawing from it their proportion of the flow through gates whose openings are regulated by a watchman employed by the different water users.

Generally speaking, this method of developing power is wasteful. The large number of turbines employed and the number which are of antiquated design and poorly installed serve to decrease the power obtained from that which would be furnished by a single plant, with a small number of wheels of modern design converting the water power into electricity and distributing it among the various owners.

CHICAGO SANITARY CANAL AT LOCKPORT

This installation utilizes the artificial flow of the drainage canal. An average head of 34 feet is available. Seven hydraulic turbines, each with a rated capacity of 6000 horsepower at the average head, are used to drive an equal number of generators rated at 4000 K.W. each. The current is generated at 6600 volts stepped up to 44,000 volts and transmitted and delivered to a transforming station at Western Avenue. Here it is stepped down to commercial voltage and transmitted to various surrounding municipalities and industrial plants.

In addition to the plants tabulated above, other installations are being contemplated. Plans for the development of a 15′ head on the Fox River at Millhurst and a 6′ head on the same river at Algonquin are under consideration.

The Illinois River in the reach of maximum declivity, extending from Lockport to Utica, will present, with the augmented flow of the Drainage Canal, an opportunity for the development of 126,000 horsepower at the turbine shaft. This has been fully set forth in various reports issued by the Internal Improvement Commission and the Rivers and Lakes Commission of this State.

Excepting those dependent on the fall or flow created by artificial channels, Illinois does not present great opportunities for the development of water power. With few exceptions the installations are of low head. A marked change in the status of water power in this State lies in the passing of the small mills formerly to be found on nearly all of our streams.

The extremes of high and low water, resulting from the extensive drainage operations carried out in the State, have removed the certainty of power, while the cutting away of the timber and the general introduction of gasoline engines, enabling the farmer to grind his own grist, have destroyed the trade which made such plants profitable.

PART II

PRESENT STATUS OF DRAINAGE IN ILLINOIS

The State of Illinois owes much of her wonderful wealth to the wide application of the principles of drainage to the vast swamp areas which extended over the State up to recent years.

Measured in geological periods, the topography of Illinois is of recent creation. The receding ice sheets of the last glacial period deposited a thick layer of detritus over the major portion of the State, obliterating the original river systems, filling valleys and leveling hills. New river systems were forced to develop, and they have not yet had time to reach back, tap and drain the innumerable ponds, lakes and marshes formed and left without a natural outlet by the great retiring sheet of ice.

In addition, Illinois is of low elevation with a mean some 260 feet lower than the average of the immediately surrounding states. Seventy-five per cent of her boundary is formed by rivers draining an area extending from the Great Plains and the Rocky Mountains to the ranges of the Appalachian system.

The maps of the early surveys in this States indicate the existence of large areas of swamps. An account of the expedition led by George Rogers Clark from Kaskaskia to Vincennes in 1779 indicates that the path lay waist deep through an almost continuous swamp.

The course of Clark and his men lay across land which is today in the heart of our famed corn belt. Richly productive farms and prosperous homes now cover the area designated as swamps on our early maps.

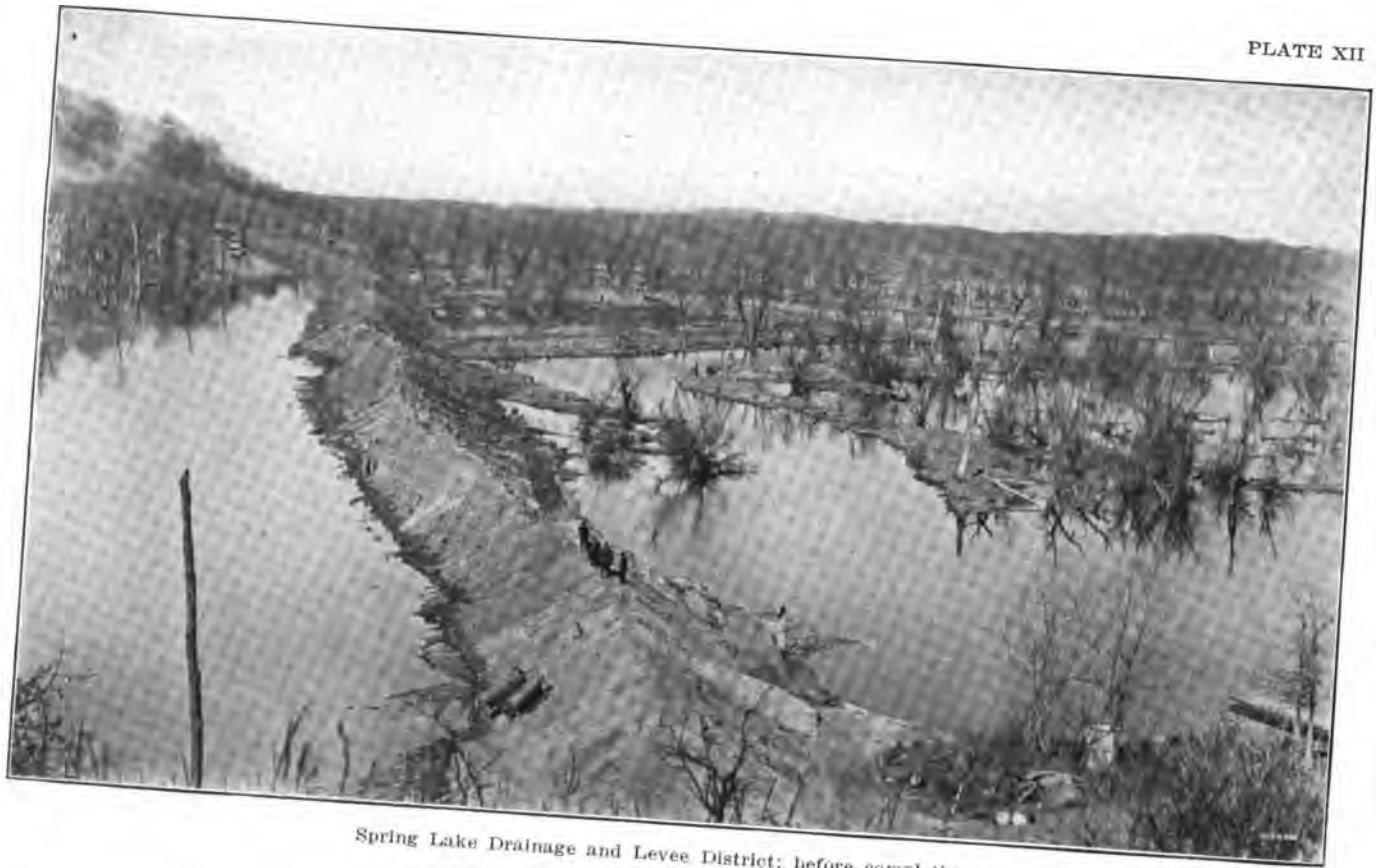
The removal of the stagnant waters of the land-locked glacial lakes and marsh; the change from the swamps of 1879 to the richly productive farms of today, improvements which have multiplied land values, two, four, and even twenty times, and brought added riches through increased public health; these benefits have all obtained through the broad development of our upland drainage.

The effect of all this work today is that our uplands have been well reclaimed. Some work is still to be done, but the major portion has been performed. Public attention is now being directed to our river bottoms where a different condition presents itself.

The purpose of drainage is to hurry the waters of excessive rain or melting snow from the land in question. But this act produces an artificial effect of our streams. Through the years of their natural formation the slope and capacity of our rivers have been adjusted by nature to accommodate the flow existing when our swamps were still undrained. These swamps acted as reservoirs, and stored the excessive waters for gradual distribution through the following months of little rain, thus maintaining a fairly uniform flow the year around.

Under the new conditions, these reservoirs have been removed, and great quantities of drainage water are poured into the streams in a short space of time. Overflowing of the banks and flooding of the bottom lands result. Extremes of high and low water and frequency of flood formerly unknown are thus brought about. A county in this State whose river bottoms were flooded nine times in a single recent year furnishes an example.

To reclaim our bottom lands in the most successful and economical way, those of each stream should be considered as a unit, in order that work done



Spring Lake Drainage and Levee District; before completion

Raising corn in Spring Lake Drainage and Levee District; work completed

Spring Lake channel, Spring Lake district

Engineers dwelling and pumping plant; Spring Lake district

at one section may not hinder or make improvement impossible at another. Co-operation of all the land holders along any stream should be possible, and all impediments which stand in the way of such co-operation should be removed.

There are about three million acres of bottom lands, subject to overflow within the borders of the State of Illinois today. Reclamation will increase these lands in value upwards of one hundred and fifty millions of dollars, besides giving an increment of more than seventy-five millions to our annual crop values, figured on a basis of corn and oats. Under intensive agriculture, this amount would be more than doubled. The benefit to the State through their reclamation is apparent.

In connection with a general report on the Water Resources of the State, the Rivers and Lakes Commission determined to collect statistics of the present status of land drainage in the State. A letter was first sent to each of the county and township clerks in the State, asking for the name of each district and the name and the address of one or more officers of each district which might exist within the county or township. To the names thus obtained a blank form asking for the following information was sent:

1. Location. Township. County.
2. Name of district.
3. Name of officers: Commissioners with addresses.
   Civil Engineer.
   Attorney.
4. Date of organization.
5. Under what law organized.
6. Under what jurisdiction. County Court or Circuit Court.
7. Is the project completed? If not, give probable date of completion.
8. Did the project accomplish its purpose?
9. Lands under cultivation. Acres.
10. Area of lands occupied by levees. Acres.
11. Area of lands occupied by ditches. Acres.
12. Area of lands occupied by roads. Acres.
13. Area of lands occupied by pump plant. Acres.
14. Area of useful lands in district. Acres.
15. Total area.
16. How many miles of levee?
17. How many miles of tile? Give diameter.....
18. How many miles of ditches?
19. How many miles of roads?
20. Give width and depth of ditches.
21. Give fall of ditch.
22. How is drainage affected? Pumping or gravity?
23. If pump plant, give size of pump or pumps.
    If pump plant, give size of engine or engines.
    If pump plant, give size of boilers.
24. Give extremes of lift, maximum and minimum.
25. If possible, give table showing lifts for different months of the year.
26. What is your fuel consumption for the year?
27. What is the annual rainfall? If possible, give table showing fall each month for as many years as you can.
28. If the project consisted of straightening or changing the course of any stream, give the following:
    a. Name of stream.
    b. Location of dredged channel.
    c. Length of completed channel.
    d. Length of stream between upper end of dredged channel and lower end of dredged channel.
    e. Cross section of dredged channel.
29. What has been the cost of the improvement work of the district? Give total assessments made to date for construction.
30. What is the bonded debt of the district?

31. What is the annual maintenance tax of the district?
32. Are there any towns, cities or villages in the district?
33. Does the district care for sewage as well as surplus water?
34. In what direction does the drainage water flow?
35. Has it been alleged that any real estate has been damaged by overflow by reason of the construction, maintenance or use of any channel or ditch or levee or other works of the district?
36. Has any suit been started to recover such damages?
37. Has any judgment been recovered?
38. Are there any obstructions to proper and economical drainage of the lands of the district or conditions beyond the control of the district that should be removed or remedied by the State or Federal authorities?
39. Remarks. Here make any statement that would be of interest for publication relating to drainage.
40. Name and postoffice address of party supplying above information.

Difficulty was experienced in obtaining full information of the various drainage districts. In some cases the efforts were viewed with suspicion, not easily removed. In others the local officers declined to furnish the information gratis. Many districts have kept no record of money spent or of the amount of work done. Still others organized in the past have served their purpose and dissolved, leaving no records behind them.

The data collected has been compiled and is presented in two tables which follow. Table No. I consists of a gazetteer of all drainage districts located in the State, giving insofar as possible the acreage of each district, the name and address of one officer of each, and stating whether or not the construction work in the district was completed at the time of the investigations. Table No. II gives total number of districts, total area, miles of tile, miles of open ditch, miles of levee and assessments for each county. The number of districts noted in Table II is not the total number of districts located in the county, but represents these of which complete information was obtained.

The figures given as miles of tile laid do not represent all of the tile laid in the State, but rather the amount laid under direction of the different districts. In many districts the tiling is left to the individual land owners.

The figures are not exact. Some districts may be omitted entirely, but it is believed that the tables generally present a good record of drainage work done in the State up to the month of May, 1912.

TABLE No. I

No.	Name	Acreage	Completed	Officers
	ADAMS COUNTY			
1	Fall Creek	.....	.....	Fred Reinbach, R. F. D., Payson
2	Indiana Grove	10,000	No	Arthur Water, Sec., R. F. D., Quincy
3	Lima Lake	13,746	..do	I. T. Ingram, Quincy
	ALEXANDER COUNTY			
4	Cairo	6,431	Yes	George Parsons, Cairo
5	North Alexander County	3,750	No	A. Ney Sessions, Attorney, Anna
6	Richland	4,092	..do	D. I. Kirkham, Sec., Olive Branch
	BOONE COUNTY			
7	Drainage District No. 1	1,280	Yes	W. S. Frye, Capron
8	Hunter Drainage District No. 1	720	..do	F. W. Marriett, Poplar Grove
	BROWN COUNTY			
9	McGee Creek (see Pike County)	.....	.....	.....
	BUREAU COUNTY			
10	Drainage District No. 1 of Greenville Twp.	700	Yes	A. M. Montgomery, Normandy
11	Drainage District No. 2 of Greenville Twp.	.....	.....	F. C. Ballman, New Bedford
12	Drainage District No. 1 of Manlius Twp	1,700	Yes	F. W. Morassy, Sheffield
13	Drainage District No. 4 of Manlius Twp	1,000	..do	C. E. Andrews, Sheffield
14	Drainage District No. 5 of Manlius Twp	.....	.....	George Pittman, Walnut

TABLE No. I—*Continued*

No.	Name	Acreage	Completed	Officers
	BUREAU COUNTY—*Concluded*			
15	Drainage District No. 6 of Manlius Twp...	500	No.....	Royal V. Cass, Wyanet.....
16	Green River Special Drainage District (Henry County also).....	33,600	Yes....	Henry L. Goembal, Geneseo.....
17	Green River Special of Bureau, Whiteside.	14,000	..do....	A. M. Montgomery, Walnut.....
18	Hickory Creek Special Drainage District...	.....	.....	L. C. Houghton, Sheffield.....
19	Mineral Marsh Drainage District.....	10,000	Yes....	Charles Riley, Mineral.....
20	Union Special of Fairfield, Greenville and Gold townships.....	10,000	..do....	E. S. Swanson, Tampico.....
	CALHOUN COUNTY			
21	Eldred Drainage Dist. (see Greene County)	.....	.....	.....
22	Nutwood Drain. Dist. (see Jersey County)	.....	.....	.....
23	Panhandle Drain. Dist. (see Jersey County)	.....	.....	.....
24	Sny Island Drain. Dist. (see Pike County)	.....	.....	.....
	CARROLL COUNTY			
25	Savanna and Yoek Drainage District.....	3,100	No.....	F. J. Stransky, Attorney, Savanna..
	CASS COUNTY			
26	Cass and Morgan Drainage District.....	.....	No.....	George Johnson, Chandlerville.....
27	Clear Creek Levee and Drainage District...	.....	.....	A. H. Krohe, Beardstown.....
28	Clear Creek Lake Drain. and Levee Dist...	.....	.....	F. F. Schaad, Virginia.....
29	Hager Slough Special Drainage District....	3,000	Yes....	Wm. R. Hager, Beardstown.....
30	Meredosia Lake Drainage and Levee Dist ..	4,073	..do....	Wm. F. Roegge, Meredosia.....
31	Farmers Drainage District.....	8,000	..do....	N. H. Boone, Chandlerville.....
32	Middle Creek Drainage District No. 1.....	870	..do....	H. A. Schand, Chandlerville.....
33	Middle Creek Drainage District No. 11.....	.....	.....	B. R. Sutton, Chandlerville.....
34	Mud Creek Drainage District.....	3,275	Repairs	M. A. Heffner, Arenzville.....
	CHRISTIAN COUNTY			
35	Drainage District No. 1, Assumption Twp..	2,560	No.....	Dennis Keating, Pana.....
36	Drainage District No. 3, Assumption Twp.	1,000	Yes....	Charles Fairbanks, Assumption.....
37	Drainage District No. 6, Assumption Twp.	2,800	No.....	C. C. Corzine, Assumption.....
38	Drainage District No. 1, Buckhart Twp ...	1,639	Yes....	T. B. Hart, Edinburg.....
39	Drainage District No. 2, Mosquito.....	1,000	..do....	Charles Young, Blue Mound.....
40	Drainage District No. 1, Owaneco.....	1,000	..do....	S. T. Danford, Owaneco.....
41	Drainage District No. 1, Ricks (Hoglake) ..	3,545	..do....	H. W. Rittger, Morrisonville.....
42	Drainage District No. 2, Rosamond.....	1,600	..do....	A. S. Wilson, Rosamond.....
43	Drainage District No. 3, Rosamond.....	1,000	..do....	H. C. Morrell, Millersville.....
44	Drainage District No. 3, South Fork.....	1,480	..do....	A. J. Howard, Pawnee.....
45	Drainage District No. 2, South Fork.....	1,600	No.....	John Gorman, Pawnee.....
46	Drainage District No. 1, and 1½.....	2,800	Yes....	John Sheedy, Pawnee.....
47	Drainage District No. 3, Stonington	2,145	..do....	J. B. Schrantz, Stonington.....
48	Drainage District No. 4, Stonington	2,700	..do....	L. S. Briggs, Stonington.....
49	Glover Special Drainage District of Christian and Montgomery counties	1,866	No.....	James Gray, Nokomis.....
50	Stonington Mutual Drainage District.....	1,000	Yes....	Frank Stock, Stonington.....
51	Union Drainage District No. 4 Assumption and Flat Branch townships.....	1,200	..do....	John Behl, Assumption.....
52	Union Drainage District No. 1 King and Bear Creek.....	1,200	..do....	Samuel Thompson, Morrisonville.....
53	Union Drain. Dist. No. 1, May and Locust.	3,000	..do....	C. A. Stattner, Owaneco.....
54	Union Drain. Dist. No. 2, May and Locust.	1,800	..do....	Oscar Long, Owaneco.....
55	Union Drain. Dist. No. 3, May and Locust.	1,450	..do....	Wm. Atkinson, Taylorville.....
56	Union Drainage District No. 1, Mosquito and Stonington.....	2,150	..do....	Wm. Greer, Mt. Auburn.....
57	Union Drainage District No. 2, Mt. Auburn and Mosquito.....	438	No.....	W. J. Wasson, Mechanicsburg.....
58	Union Drainage District No. 1, Pana and Assumption.....	5,578	..do....	W. D. Fribley, Pana.....
59	Union Drainage District No. 3, Pana and Assumption.....	6,500	Yes....	D. B. Stein, Assumption.....
60	Union Drainage District No. 2, Ricks and Roundtree.....	800	..do....	J. F. Thunhorst, Harvel.....
61	Union Drainage District No. 4, Ricks and Roundtree.....	1,453	..do....	Peter Best, Morrisonville.....
62	Union Drainage District No. 1, Ricks and Roundtree.....	615	..do....	Harm Arkebauer, Morrisonville.....
63	Union Drainage District No. 3, Ricks and Roundtree.....	1,000	..do....	Charles Rittger, Morrisonville.....
64	Barrett Mutual.....	.....	.....	P. C. Ellis, Blue Mound.....
65	Buckhart Mutual No. 1.....	.....	.....	Oscar Fields, Blue Mound.....
66	Bug River Special Drainage District.....	.....	.....	W. S. Davidson, Blue Mound.....
67	Clear Creek Special.....	.....	.....	W. H. Henshie, Taylorville.....
68	Drainage District No. 2, Assumption Twp.	.....	.....	Edward Behl, Assumption.....
69	Drainage District No. 5, Assumption Twp.	.....	.....	John Behl, Assumption.....

TABLE No. I—*Continued*

No.	Name	Acreage	Completed	Officers
	CHRISTIAN COUNTY—*Concluded*			
70	Drainage District No. 2, Buckhart Twp			J. Bruley, Assumption
71	Drainage District No. 1, Mosquito Twp			
72	Drainage District No. 3, Mosquito Twp			
73	Drainage District No. 1, Pana Township			
74	Drainage District No. 4, Rosamond Twp			D. C. Bess, Rosamond
75	Drainage District No. 1, Stonington			E. A. Ponting, Stonington
76	Drainage District No. 2, Stonington			L. S. Briggs, Stonington
77	Drainage District No. 5, Stonington			P. J. Ryan, Stonington
78	Drainage District No. 1, Taylorville Twp.			Richard Davis, Taylorville
79	Drainage District No. 2, Taylorville Twp.			
80	Greenwood Mutual No. 1			
81	Hay-Heddin Mutual No. 3			
82	Johnson Township Mutual			
83	Locust Mutual No. 2			
84	Locust and Assumption Mutual			
85	Mosquito Mutual No. 1			
86	Mosquito Mutual No. 2			
87	Mosquito Mutual No. 3			
88	Mt. Auburn and Mosquito Mutual			
89	South Fork Mutual No. 1			
90	South Fork Mutual No. 2			
91	Stonington Mutual No. 2			
92	Stonington Mutual No. 3			
93	Taylorville Mutual No. 1			
94	Taylorville Mutual No. 2			
95	Taylorville Surface No. 1			
96	Taylorville Surface No. 2			
97	Taylorville Surface No. 3			
98	Taylorville Surface No. 4			
99	Union Drainage District No. 1, Assumption and Flat Branch			Alex Brannigan, Assumption
100	Union Drainage District No. 2, Assumption and Flat Branch			
101	Union Drainage District No. 4 Assumption and Flat Branch			Joseph Osborn, Assumption
102	Union Drainage District No. 1, Assumption and May			
103	Union Drainage District No. 1, King and Boies De Arc			
104	Union Drainage District No. 2, King and Boies De Arc			
105	Union Drainage District No. 4, King and Boies De Arc			
106	Union Drainage District No. 1, King and Harvel			
107	Union Drainage District No. 2, King and Harvel			
108	Union Drainage District No. 3, King and Harvel			
109	Union Drainage District No. 1, King and Hicks			
110	Union Drainage District No. 2, May and Locust			Oscar Long, Owaneco
111	Union Drainage District No. 1, Mosquito and Mt. Auburn			
112	Union Drainage District No. 2, Mosquito and Stonington			
113	Union Drainage District No. 3, Mosquito and Stonington			
114	Union Drainage District No. 2, Pana and Assumption			
115	Union Drainage District No. 1, Pana and Rural			
116	Union Drainage District No. 1, Stonington and Pleasant View			Albert Zeigler, Stonington
117	Union Drainage District No. 1, Prairieton and Pleasant View			
118	Union Drainage District No. 1, Taylorville and May			
	CHAMPAIGN COUNTY			
119	Beaver Lake Drainage District			W. A. Lashemeyer, Champaign
120	Big Slough Drainage District Rantoul Twp.	15,000	Yes	Patrick Connors, Rantoul
121	Black Slough Drainage District, Philo and Crittenden			Jerry Plotner, Philo
122	Camp Creek Special Drainage District, Scott and Mahomett	13,000	No	Wm. Earl, Seymour

TABLE No. I—*Continued*

No.	Name	Acreage	Completed	Officers
	CHAMPAIGN COUNTY—*Concluded*			
123	District No. 1 by User Peactum	3,300	Yes	F. J. Hartman, Pesotum
124	District No. 1, Sadorus	680	No	D. C. Holterman, Sadorus
125	District No. 1, St. Joseph	800	Yes	H. S. Walker, St. Joseph
126	District No. 3, St. Joseph and Urbana	6,500	No	Edw. Hudson, St. Joseph
127	District No. 1, Stanton	2,070	Yes	M. E. Leigh, St. Joseph
128	District No. 1, Crittenden			M. Miller, Philo
129	District No. 2, by User Pesotum			Mike Klisse, Pesotum
130	District No. 4, St. Joseph			A. M. Koch, Mayview
131	District No. 5, St. Joseph			M. Kilburg, St. Joseph
132	District No. 6, St. Joseph			Louis Denhart, St. Joseph
133	District No. 8, St. Joseph			J. M. Peters, St. Joseph
134	Dry Fork Mutual Drainage Dist., Sadorus	2,000	Yes	Michael Loftus, Ivesdale
135	Embarass River Special, Ayers	10,000	..do	H. N. Six, Broadlands
136	East Lake Fork, Colfax	55,000		Albert C. Snyder, Sadorus
137	Fountain Head, Scott and Mahomet	20,250	Yes	A. S. Scott, Seymour
138	Flatville Special, Compromise and Stanton	7,000	..do	Altman Bushorn, Rantoul
139	Hillsbury Slough Special (Ford Co. also)	12,000	No	Ray & Dobbins, Attys., Champaign
140	Kankakee Drainage District, Scott, Colfax and Monticello	12,000	..do	Thomas J. Cannon, Ivesdale
141	Little Vermilion Special (Vermilion Co. also)	2,200	Yes	Wm. Hippe, Homer
142	Lower Salt Fork Drainage District, St. Joseph, etc	200,000	No	U. G. Swearingen, St. Joseph
143	Long Point Special, Crittenden and Ayers	6,000	Yes	M. H. Keefe, Long View
144	Lotus Special Drainage District (Piatt and McLean Counties also)	30,500	..do	Wm. Brown, Belle Flower
145	Owl Creek Drainage District, Newcomb and Brown Townships	2,700	No	Wiley Fanston, Mahomet
146	Pesotum Special			Michael Hettinger, Pesotum
147	Phinney Branch Mutual, Champaign Twp	4,500	No	Joseph Carter, Champaign
148	Saline Branch, Champaign	10,360	..do	Thomas Lyman, Champaign
149	Silver Drainage District			O. Frankenburg, Urbana
150	Silver Creek Drainage District, Urbana, St. Joseph and Sidney	6,000	Yes	Lewis Prather, Sidney
151	Sangamon and Drummond Drainage Dist	4,400	No	R. A. Sturgeon, Fisher
152	Spoon River Drainage District	19,000	..do	Henry Duitsman, St. Joseph
153	Two Mile Slough Drainage Dist., Pesotum	20,211	Yes	E. Shell, Sadorus
154	Union Drainage District No. 1, Philo and Sidney	1,902	..do	S. C. Stewart, Philo
155	Union Drainage District No. 1, Philo and Urbana	1,800	..do	D. A. Silver, Urbana
156	Union Drainage District No. 1, Philo and Crittenden			Jerry Plotner, Philo
157	Union Drainage District No. 1, St. Joseph and Ogden	2,140	Yes	M. J. Patterson, St. Joseph
158	Union Drainage District No. 2, Somets and Stanton	8,000	..do	M. L. Waters, Urbana
159	Wild Cat Special, East Bend	10,000	..do	Henry Hummel, Dewey
	CLARK COUNTY			
160	Oilfield Drainage District, Parker	1,428	Yes	Samuel Spelbring, Westfield
161	Drainage District No. 1, Parker	2,100	..do	Payton Beasley, Martinsville
162	Drainage District No. 1, Parker	1,800	..do	W. B. Linn, Martinsville
163	Drainage District No. 1, York	3,090	..do	Morris Logue, Marshall
164	Drainage District No. 2, York	2,000	..do	Daniel Preest, Walnut Prairie
	CLAY COUNTY			
165	Little Wabash & Big Muddy Drainage District, Clay City and Pixely	3,000	No	Henry Striegel, Clay City
	CLINTON COUNTY			
166	Hanover Drainage and Levee District, Santa Fé and Germantown	3,430	No	George Bergman, Bartelso
167	Santa Fé Levee and Drainage District, Santa Fé	3,000	..do	Nicholas Enrlinger, Bartelso
	COOK COUNTY			
168	Drainage District No. 1, Bremen Twp	300	Yes	C. Andres, Tinley Park
169	Drainage District No. 3, Bremen Twp	700	..do	Wm. Marhoff, Tinley Park
170	Drainage District No. 1, Elk Grove	3,000	No	H. E. Lange, Arlington Heights
171	Drainage District No. 1, Hanover	500	Yes	Gus Giop, Elgin
172	Drainage District No. 2, Hanover	328	..do	Charles F. Cromer, Bartlett
173	Drainage District No. 1, New Frien	910	..do	Wm. Bengel, Gross Point
174	Drainage District No. 2, Orland	1,097	..do	E. H. Cooper, Orland
175	Drainage District No. 4, Orland	490	..do	David Agate, Orland
176	Drainage District No. 2, Rich			Fred Marquardt, Matteson

TABLE No. I—*Continued*

No.	Name	Acreage	Completed	Officers
	COOK COUNTY—*Concluded*			
177	Union No. 2 of Orland and No. 3 of Bremen.	800	Yes....	Fred Nielson, Tinley Park.....
178	Union No. 3 of Orland and No. 2 of Bremen.	3,000	..do....	Charles Kimmel, Tinley Park.....
179	Union No. 6 of Orland and Frankfort....	.....	.....	Wm. Mancke, Tinley Park.....
180	Union No. 1 of Rich and Frankfort.....	6,000	..do....	Henry Reechers, Mattoon.....
	COLES COUNTY			
181	Crab Apple Creek Union Drainage District No. 1, Humboldt Township.....	1,800	Yes....	J. R. Farrar, Mattoon.....
182	District No. 2, Humboldt Township	.....	.....	Henry Furste, Humboldt.....
183	District No. 3, Humboldt Township	.....	.....	James McDough, Humboldt.....
184	District No. 4, Humboldt Township.....	.....	.....	Henry Furste, Humboldt.....
185	District No. 5, Humboldt Township	.....	.....	..do.....
186	District No. 1, Paradise Township.....	2,000	Yes....	B. H. Lawson, Mattoon.....
187	District No. 3, by user of Paradise Twp....	450	..do....	W. M. Champion, Mattoon.....
188	Kickapoo Drainage District.....	.....	.....	George H. Reedy, Mattoon .....
189	Little Wabash Drainage District, Mattoon.	3,012	No.....	Frank Cox, Mattoon.....
190	Riley Creek Drainage District.....	.....	.....	J. W. Craig, Attorney, Mattoon.....
191	Union Drainage District No. 1 of Charleston and Seven Hickory.....	1,842	Yes....	J. H. Snider, Charleston.....
192	Union Drainage District No. 2 of Morgan and Seven Hickory.....	1,000	..do....	William Miller, Hardin.....
193	Union Drainage District No. 3 of Morgan and Seven Hickory.....	3,000	..do....	J. H. Toland, Bushton.....
	CRAWFORD COUNTY			
194	Frog Pond Drainage District.....	.....	.....	Robert Fife, Palestine.....
195	Green Briar Drainage District, Martin Twp.	6,000	No.....	T. P. Willard, Oblong.....
196	Lamott & Montgomery Township Drainage District.....	4,000	..do....	William F. Buser, Palestine.....
	CUMBERLAND COUNTY			
197	Drainage District No. 1, Cottonwood Twp.	450	Yes....	J. D. Hill, Toledo.....
198	Drainage District No. 1, Neoga Township .	1,648	..do....	Gurney Lindley, Neoga.....
199	Drainage District No. 2, Neoga Township.	1,200	..do....	Edward Kraft, Neoga.....
200	Drainage District No. 3, Neoga Township.	2,200	..do....	J. B. Millbacher, Neoga.....
201	Lambert Drainage District, Neoga Twp...	600	..do....	..do.....
202	Mutual Drainage District No. 1, Neoga Twp.	600	..do....	..do.....
	DEKALB COUNTY			
203	Coon Creek Drainage District.....	8,000	No.....	John Faisler, Attorney, Sycamore....
204	Drainage District No. 1, Victor Township.	3,000	Yes....	Fred Legner, Leland.....
205	Drainage District No. 3, Mattoon Township.	.....	.....	John Faisler, Sycamore.....
206	Drainage District No. 1, Somonauk Twp..	.....	.....	Edward Peckman, Somonauk.....
207	Kishwaukee Special Drainage District	.....	.....	F. Langlois, Sycamore.....
208	Malta, Milan, Aftona, DeKalb Special.....	6,000	Yes....	George L. Welch, Malta.....
209	Union No. 1 of Shabbona and Milan.....	4,840	..do....	Charles Nau, Shabbona.....
210	Union No. 1 of Afta and Milan.....	6,800	..do....	S. W. Marshall, Shabbona.....
211	Union No. 1 of Afta and DeKalb.....	8,500	..do....	Leroy Wiltse, Elva.....
212	Union No. 1 of Cortland and Peirce.....	3,500	..do....	A. VanPatten, DeKalb.....
213	Union No. 1 of Somonauk and Victor	.....	.....	F. Kirkpatrick, Sandwich.....
214	Union No. 3, Virgil and Cortland (Kane County also).....	.....	.....	J. Faisler, Attorney, Sycamore.....
215	Union No. 3, Afton and Milan.....	.....	.....	..do.....
216	Union No. 2, Cortland and Peirce.....	.....	.....	..do.....
217	Union No. 3, Cortland and Peirce.....	.....	.....	..do.....
218	Union No. 1 of Kaneville (Kane County) and Peirce townships.....	.....	.....	..do.....
	DEWITT COUNTY			
219	Barnett Special Drainage District.....	.....	.....	F. M. Samuel, Clinton.....
220	Clintonia Special Drainage District, Wapella and Clintonia.....	1,800	Yes....	J. M. Greene, Wapella.....
221	Creek Union Drainage District No. 1, Creek	11,000	No.....	Byron Miller, Maroa.....
222	DeWitt Special Drainage District (Piatt County also).....	10,000	..do....	A. L. Hall, Farmer City.....
223	Friends Creek Special Drainage District (Piatt County also).....	25,000	Yes....	P. M. Smallwood, Weldon.....
224	Goose Creek Special Drainage District (Piatt County also).....	2,000	No.....	E. C. Swigart, Farmers City.....
225	Nixon Special Drainage District.....	.....	.....	George Williams, Weldon.....
226	Texas Special Drainage District (Macon County also).....	6,000	No.....	H. P. Grady, 928 Main Street, Decatur
	DOUGLAS COUNTY			
227	Craig Drainage Dist. No. 13 by User Tuscola.	1,950	No.....	J. B. Hopkins, Tuscola.....
228	District No. 1, Arcola Township.....	.....	.....	A. Thompson, Arcola.....

TABLE NO. I—*Continued*

No.	Name	Acreage	Completed	Officers
	DOUGLAS COUNTY—*Concluded*			
229	District No. 2, Arcola Township	.....	.....	C. L. McTaggart, Arcola
230	District No. 3, Arcola and Tuscola	.....	.....	C. W. Wilmeth, Tuscola
231	District No. 4, Arcola	2,500	No.	P. J. Goggin, Arcola
232	District No. 5, Arcola	.....	Dissolved	
233	District No. 6, Arcola	.....	.....	Fred Munson, Arcola
234	District No. 7, Arcola	1,338	Yes	John D. Hall, Arcola
235	District No. 8, Arcola and Humboldt	2,340	..do	George Hansen, Arcola
236	District No. 10, Arcola	.....	.....	A. H. Foster, Arcola
237	District No. 11, Arcola	2,010	Yes	D. P. Wesch, Arcola
238	District No. 12, Arcola	.....	.....	Fred Munson, Arcola
239	District No. 13, Arcola and Bourbon	1,629	Yes	D. P. Wesch, Arcola
240	District No. 14, Arcola	.....	.....	G. H. Foster, Tuscola
241	District No. 15, Arcola	640	Yes	G. M. Seipp, Tuscola
242	District No. 1, Bourbon	.....	.....	C. N. Jones, Chesterville
243	District No. 3, Bourbon	.....	.....	Luke Head, Chesterville
244	District No. 5, Bourbon	.....	.....	J. F. Martin, Chesterville
245	District No. 3, Canargo	2,000	Yes	James E. Hackett, Tuscola
246	District No. 2, Garrett	4,200	..do	R. M. Revell, Tuscola
247	District No. 4, Tuscola	2,268	..do	James E. Hackett, Tuscola
248	District No. 5, Tuscola	.....	..do	John Thoeming, Tuscola
249	District No. 15, Tuscola	.....	.....	Geo. M. Seipp, Tuscola
250	District No. 16, Tuscola	.....	.....	J. E. Hackett, Tuscola
251	Union Drainage District No. 1, Bourbon and Arcola	2,480	Yes	C. N. Jones, Chesterville
252	Union Drainage District No. 1, Bourbon and Garrett	7,777	..do	H. L. Wyeth, Garrett
253	Union Drainage District No. 4, Murdock and Canargo	1,300	..do	W. N. Williams, Fairland
254	Union Drainage District No. 5, Tuscola and Arcola	2,000	..do	G. M. Seipp, Tuscola
255	Union Drainage District No. 14, Tuscola and Arcola	.....	.....	..do
256	Union Drainage District No. 15, Tuscola and Arcola	.....	.....	J. E. Hackett, Tuscola
	DUPAGE COUNTY			
257	Drainage District No. 1, Bloomingdale	1,189	Yes	Albert Meyer, Roselle
258	Drainage District No. 2, Bloomingdale	259	..do	Fred Frick, Roselle
259	Drainage District No. 1, Naperville	536	..do	John J. Beek, Naperville
260	Aesterman Drainage District, Milton	1,200	..do	Mutual District
261	Milton Drainage District, Milton	300	..do	Robert Lockman, Wheaton
	EDGAR COUNTY			
262	Drainage District No. 8, Embarrass	900	Yes	E. S. Barton, Barton
263	Drainage District No. 9, Embarrass	1,478	No	W. E. Glick, Kansas
264	Drainage District No. 2, Kansas	2,000	..do	H. W. Morris, Kansas
265	Drainage District No. 3, Kansas	1,600	Yes	H. W. Morris, Kansas
266	Drainage District No. 1, Prairie	2,000	..do	John F. Coe, Scotland
267	Drainage District No. 2, Prairie	1,600	..do	W. A. Pritchett, Scotland
268	Drainage District No. 3, Prairie	1,600	.....	O. B. Riley, Scotland
269	Drainage District No. 4, Prairie	1,828	.....	J. C. Hollsday, Scotland
270	Drainage District No. 1, Ross	.....	.....	W. P. Clark, Chrisman
271	Drainage District No. 1, Shiloh	.....	.....	I. A. Powers, Brocton
272	Drainage District No. 2, Shiloh	.....	.....	C. C. Rolles, Brocton
273	Drainage District No. 3, Shiloh	.....	.....	Joseph Armstrong, Hume
274	Drainage District No. 7, Shiloh	.....	.....	J. R. Pinnel, Hume
275	Drainage District No. 1, Young America	14,080	Yes	A. E. Woods, Hume
276	Paris & Buck Drainage District No. 2	.....	No	F. T. O'Hair, Paris
277	Union Drainage District No. 1, Shiloh and Edgar	.....	.....	Pat Sullivan
278	Union Drainage District No. 1, Shiloh and Young America	.....	.....	D. M. Gossett, Brocton
279	Drainage District No 1, Brocton	.....	.....	J. D. Powers
280	Shiloh Drainage District No. 11	835	No	Harry Brock Jones, Paris
	EDWARDS COUNTY			
281	Drainage District No. 1	1,558	Yes	David A. Macaulay, Albion
	FAYETTE COUNTY			
282	Bear Grove Drainage District	4,500	Yes	H. J. Belknap, Vandalia
283	Dively Levee & Drainage District	1,250	No	George L. Wright, Vandalia
284	Grassy Lake Levee & Drainage District	3,515	Yes	George R. Van Horn, Vandalia
285	Fish Lake Drainage & Levee District	4,000	..do	John Bunyard, Vandalia
288	Meridian Line Drainage District, Vandalia and Bear Grove	650	No	E. Robbins, Vandalia

TABLE No. I—*Continued*

No.	Name	Acreage	Completed	Officers
	FAYETTE COUNTY—*Concluded*			
289	Pecan Island Levee District, Kaskaskia	800	Yes	C. R. Dees, Shabonier
290	Pepper Mill Brande Levee and Drainage District, Carson	1,700	..do	Hiram Hennon, Ramsey
291	Pond Lily Drainage District, Seminary	200	No	M. E. Bone, Vandalia
292	Soper Lake Drainage District, Pope	3,600	..do	H. S. Carroll, Patoka
293	Vandalia Levee & Drainage District, Vandalia, Sefton and Kaskaskia	13,500	No	George F. Suerly, Vandalia
294	Wild Cat Drainage District, Kaskaskia and Pope	5,689	Yes	J. U. Metzger, Vandalia
	FORD COUNTY			
295	Big Four Drainage District, Patton	38,000	Yes	R. C. Parks, Paxton
296	Drainage District No. 1 of Lyman and Wolf	5,600	..do	John Talbot, Roberts
297	Harmony Drainage District, Lyman	700	..do	..do
298	Little Lyman Drainage District, Lyman	600	..do	..do
299	Lyman Twp. Drainage Dist. No. 1, Lyman	12,500	..do	..do
300	Pella Drainage District No. 1, Pella	.....	.....	A. D. Reed, Piper City
301	Pella Drainage District No. 2, Pella and Brenton	.....	Yes	F. J. Jackson, Piper City
302	Union Drainage District No. 1, Pella	.....	.....	A. D. Reed, Piper City
303	Vermilion Special Drainage District of Ford, Livingston and Iroquois counties	36,160	No	Joseph Keefe, Piper City
304	Wall Twp. Drainage District, Wall	.....	.....	Joseph Shiltz, Melvin
	FULTON COUNTY			
305	Lacey Levee District, Isabel	3,000	Yes	O. J. Coon, Havana
306	Otter Creek Drainage District, Kerton	.....	.....	Loren Freeman, Havana
307	Langallier Drainage District, Kerton	2,136	Yes	A. L Langallion, Havana
	GALLATIN COUNTY			
308	Cypress Special Drainage District	10,000	Yes	G. A. Lowe, Shawneetown
309	Drainage District No. 2, Equality	.....	No	C. W. Morton, Equality
310	Drainage District No. 1, Ridgway	.....	..do	George W. Moye, Ridgway
311	Drainage District No. 1, Gold Hill	.....	..do	George W. Kanady, Junction
312	Pond Settlement Drainage District, Ridgway and Gold Hill	3,790	Yes	Robert Crunk, Ridgway
313	Ridgway and Asbury Union No. 1	1,000	Yes	A. J. Barnett, Ridgway
314	Union Drainage District No. 2, Asbury and Ridgway	9,000	..do	J. C. Anderson
	GREENE COUNTY			
315	Eldred Drainage and Levee District, Weedville and Bluffdale	9,300	No	Leroy McFarland, Carrollton
316	Hartwell Drainage and Levee District, Walkerville and Patterson	8,800	..do	A. J. Barnett, Hillview
317	Hillview Drainage and Levee District, Greene and Scott	12,370	Yes	Melvin Watts, Whitehall
318	Keoch Drainage and Levee District, Bluffdale and Walkerville	10,492	..do	Loren McKee, Carrollton
	GRUNDY COUNTY			
319	Claypool Levee and Drainage District	.....	.....	W. I. Dudgeon, Morris
320	Mason Creek Drainage District, Greenfield	.....	.....	W. P. Olroyd, South Wilmington
	HAMILTON COUNTY			
321	Aurier Creek Specialty	.....	.....	Dennis Kennedy, Dahlgren
322	Haw Creek Special	27,000	Yes	Elza Redmon, McLeansboro
323	North Fork Special Drainage District, Hamilton and Saline counties	24,000	No	G. W. Donley, McLeansboro
	HANCOCK COUNTY			
324	Hunt Drainage District, Wilcox and Rocky Run	16,000	Yes	George Schafer, Warsaw
	HENDERSON COUNTY			
325	Henderson County Drainage District No. 1	7,200	No	John Y. Whiteman, Biggsville
326	Henderson County Drainage District No. 2	8,200	..do	..do
	HENRY COUNTY			
327	Big Slough Special Drainage District, Henry and Whiteside	.....	.....	Andrew Smith, Geneseo
328	Blue Joint Special Drainage District	3,000	Yes	John M. Gelrhart, Geneseo
329	Central Special Drainage District, Yorkstown and Prophetstown	1,700	..do	J. I. Miller, Hooppole
330	Green River Special Drainage District (see Whiteside County)	.....	.....	.....

TABLE No. I—*Continued*

No.	Name	Acreage	Completed	Officers
	HENRY COUNTY—*Concluded*			
331	Mud Creek Special Drainage District	6,000	Yes	John W. Keiver, Annawan
332	North Edwards Special Drainage District	.....	.....	Wm. S. Johnston, Cambridge
333	Shabbons Special Drainage District, Atkinson and Cornwall	4,000	Yes	John Doubler, Atkinson
334	Union Drainage District No. 1, Atkinson and Alba	.....	.....	Robert Galbraith, Atkinson
335	Union Special of Henry and Whiteside Counties	16,400	Yes	Wm. Ropendick, Prohpetstown
336	Yorkstown Drainage District No. 1, Yorkstown	2,875	..do.	John W. Brown, Hooppole
	IROQUOIS COUNTY			
337	Artesia Drainage District No. 4, Artesia and Pigeon Grove	.....	.....	Louis Shafer, Buckley
338	Beaver Creek Drainage District, Papineau	3,800	Yes	Ed. Lottinville, Papineau
339	Beaver Creek Drainage Dist. No. 3, Beaver	8,380	..do.	Y. F. Fortin, Beaverville
340	Big Beaver Drainage and Levee District, Beaver	8,048	..do.	C. Hafstrom, Donovan
341	Blackstone Drainage District, Beaver and Concord	4,040	..do.	G. F. Miller, Donovan
342	Crescent Drainage District No. 1, Crescent	.....	.....	James O. West, Watseka
343	Danforth Drainage District No. 3, Danforth	.....	.....	Charles Booi, Danforth
344	Eastburn Drainage District No. 1, Sheldon	2,800	Yes	Silas Hoagland, Sheldon
345	Eastburn Drainage District No. 2, Sheldon	1,300	..do.	E. E. Webster, Sheldon
346	Iroquois Drainage District No. 1, Iroquois and Middleport	.....	.....	Charles Kaufman, Watseka
347	LaHogue Drainage District No. 1, Ridgland Douglas and Danforth	18,500	No.	L. Kraft, Jr., Gilman
348	Martinton Drainage Dist. No. 3, Martinton	21,379	..do.	A. C. Morrison, Martinton
349	Martin Drainage District No. 4, Martinton	8,000	..do.	C. H. Edison, Martinton
350	Middleport Drain. Dist. No. 1, Middleport	16,000	Yes	J. B. Hoke, Watseka
351	Milks Grive Special Milk Grove Drainage District No. 1	10,000	..do.	J. C. Gleason, Clifton
352	Onargo Drainage District No. 2, Onargo	1,200	..do.	D. A. Stitt, Onargo
353	Onargo Drainage District No. 4, Onargo	2,592	..do.	M. K. Smith, Onargo
354	Onargo Drainage District No. 3, Onargo	900	..do.	W. A. Elliott, Onargo
355	Papineau Drainage District No. 2, Papineau	.....	.....	R. Thenier, St. Anne
356	Papineau Drainage District No. 3, Papineau	2,500	Yes	Leon Baron, Martinton
357	Possum Trot Drainage District, Belmont and Sheldon	11,000	..do.	Erlan C. Clark, Sheldon
358	Union Drainage District No. 1, Ashkum and Danforth	20,000	..do.	W. A. Elliott, Onargo
359	Union Drainage District No. 2, Ashkum and Danforth	.....	.....	John Kemper, Onargo
360	Union Drainage District No. 1, Crescent and Iroquois	.....	Yes	Richard Kelly, Watseka
361	Union Drainage District No. 1, Loda and Artesia	1,571	..do.	R. O. Hollister, Loda
362	Union Drainage District No. 1, Martinton and Iroquois	6,374	..do.	J. W. Gregory, Watseka
363	Union Drainage District No. 1, North Sheldon and South Concord	5,500	..do.	J. F. Dart, Sheldon
364	Union Drainage District No. 1, Onargo and Ridgland	4,000	..do.	W. J. Kraflin, Onargo
365	Union Drainage District No. 1, Papineau and Martinton	3,894	..do.	B. N. Pawley, Papineau
366	Special Drainage District No. 1, of Onargo, Douglas and Danforth	16,000	..do.	A. Meinhard, Gilman
	JACKSON COUNTY			
367	Big Lake Special Drainage District, Kinkaid, Sandridge and Fountain Bluff	15,841	No.	H. L. Brickey, Jacob
368	Boone's Pond Mutual Degognia Drainage District	1,200	Yes	C. M. Korands, Cora
369	Degognia and Fountain Bluff Drainage District	30,000	No.	H. L. Brickey, Jacob
370	Grand Tower Drainage and Levee District, Grand Tower	2,698	Yes	M. W. Baysinger, Grand Tower
371	Jones Pond Mutual Drainage District, Degognia	5,000	..do.	Whitney Gilbreath, Chester
	JASPER COUNTY			
372	Hickory Drainage District, Wade Twp	675	Yes	W. A. Hunt, Newton
373	Marsh Drainage District	.....	.....	P. R. Henry, Newton
374	Mint Creek Drainage District, Wade	8,000	No.	W. H. Kibler, Newton

TABLE No. I—*Continued*

No.	Name	Acreage	Completed	Officers
	JERSEY COUNTY			
375	Nutwood Drainage and Levee District, Jersey and Greene Counties	10,887	Yes	S. W. Reddick, Jerseyville
376	Panhandle Drainage District	.....	.....	J. F. Mains, Kane
	JOHNSON COUNTY			
377	Belknap Drainage Dist., Cache and Vienne	6,000	Yes	Charles H. Mason, Belknap
	KANE COUNTY			
378	Big Rock Drainage Dist. No. 1, Big Rock	1,000	Yes	J. C. Wheldon, Big Rock
379	Blackberry Drain. Dist. No. 1, Blackberry	1,360	..do	J. C. J. Kibling, Batavia
380	Burlington Drain. Dist. Bo. 1, Burlington	1,500	..do	Fred Middleton, Burlington
381	Burlington Drain. Dist. No. 2, Burlington	1,000	..do	J. P. Anderson, Burlington
382	East Run Drainage District, Aurora	.....	No	D. Gill Scott, North Aurora
383	Kaneville Drainage Dist. No. 1, Kaneville	1,400	.....	.....
384	Rob Roy Drainage District, Sugar Grove	2,200	Yes	C. J. Zeller, Sugar Grove
385	Sugar Grove Drainage District No. 1, Sugar Grove	530	..do	..do
386	Lake Run Drainage District, Sugar Grove and Blackberry	2,260	..do	.....
387	Rutland and Grafton Drainage District, Kane and McHenry counties	5,000	Yes	H. Marks, Gilbert
388	Union Grainage District No. 1, Kaneville Pierce, Kane and DeKalb counties	760	..do	F. Kennedy, Maple Park
389	Union Drainage District No. 1, Kane and Kendall counties	.....	..do	Sears & Smith, Attorneys, Aurora
390	Union Drainage District No. 1, Kaneville and Blackberry	4,680	..do	M. Gaunt, Elburn
391	Union Drainage District No. 1, Plato and Rutland	4,500	..do	H. O. Barnes, Elgin
392	Union Drainage District No. 3, Virgil	800	..do	F. Dobson, Lily Lake
393	Virgil Drainage District No. 1, Virgil	3,920	..do	.....
394	Virgil Drainage District No. 2, Virgil	2,080	..do	.....
395	Virgil Drainage District No. 3, Virgil	3,600	..do	E. J. Richardson, Maple Park
	KANKAKEE COUNTY			
396	Clausen Park Drainage and Levee District, Wichert	3,200	Yes	R. Strandstra, St. Anne
397	Duperis Granger Drainage District No. 1, Manteno	800	..do	J. W. Lesage, Manteno
398	Fortin Drainage District No. 10, Manteno	1,600	..do	A. Fortin, Manteno
399	Gar Creek Drainage District, Kankakee, Otto, and Limestone	8,200	No	J. M. Shea, Kankakee
400	Hopkins Drainage District, Pembroke	10,690	Yes	W. G. Kenaga, Kankakee
401	Little Beaver Special Drainage District of Kankakee and Iroquois counties	32,000	..do	J. McNamara, Beaverville
402	McGilvroy Creek Special Drainage District, Saline and Custer	5,200	No	D. Dwyer, Bonfield
403	Manteno Drainage District No. 7, Manteno	.....	.....	L. Cyrier, Bourbonnais
404	Manteno Drainage District No. 9, Manteno	1,050	Yes	W. Croxen, Manteno
405	Manteno Drainage District No. 12, Manteno	.....	.....	V. W. Lawrence, Manteno
406	Minnie Creek Drainage District, Otto	6,000	Yes	W. Miller, Chebanse
407	Oxaline Creek Union Drainage District No. 2, Sumner and Milltop of Kankakee and Will counties	2,000	..do	G. Albans, Beecher
408	Raymond Drainage District	4,000	No	H. A. Magruder, Kankakee
409	Rockville Drainage District No. 1, 2 and 3, Rockville	2,575	Yes	L. Lamore, Manteno
410	Salina Union No. 1	.....	.....	Henry Freeling, Bonfield
411	Union Drainage District No. 1, Manteno and Bourbonnais	6,000	Yes	Peter Granger, Kankakee
412	Union Drainage District No. 1, Manteno and Sumner	4,000	No	Patrick Grant, Manteno
413	Union Drainage District No. 2, Manteno and Sumner	1,892	Yes	Charles J. O'Neill, Manteno
414	Union No. 1, Momence and Pembroke	.....	.....	M. M. Porter, Momence
415	Union No. 2 of Sumner, Milltop, Kankakee and Will counties	.....	.....	.....
	KENDALL COUNTY			
416	Big Slough Drainage District, Big Grove Township	2,600	Yes	Walter Finnin, Millington
417	Blackberry Drainage District, Bristol Twp.	410	..do	Theo. Alans, Bristol
418	Morgan Creek Drainage District, Kendall, Oswego and Ne-Au-Say	.....	No	Fred Baker, Bristol
419	Raymond Drainage District, Bristol	1,800	Yes	L. B. Raymond, Bristol

TABLE No. I—*Continued*

No.	Name	Acreage	Completed	Officers
	LAKE COUNTY			
420	Drainage District No. 1, Vernon	700	Yes	Miles Conway, Prairie View
421	Drainage District No. 2, Vernon	1,665	No	M. R. Miller, C. E. Waukegan
422	Seavey Slough Drainage District, Vernon and Libertyville	1,056	Yes	F. L. Davis, Libertyville
423	Union Drainage District, Deerfield and Northfield	3,000	No	Thomas Carolan, Deerfield
424	West Skokie Drainage District, West Deerfield and Libertyville	3,000	Yes	A. F. White, Gray's Lake
	LASALLE COUNTY			
425	Drainage District No. 1, of Allen Township	1,070	Yes	Wm. Baker, Ransome
426	Drainage District No. 1, of Earle Township	600	..do	C. R. More, Earleville
427	Drainage District No. 1, of Farm Ridge Twp	1,200	..do	J. A. Moss, Grand Ridge
428	Drainage District No. 1, of Freedom Twp	4,500	..do	L. P. Hughes, Earleville
429	Drainage District No. 1 of Meriden Twp	.....	..do	Arthur Grey, Earleville
430	Drainage District No. 1 of Richland Twp	.....	.....	Frank Morre, Streator
431	Drainage District No. 2 of Richland Twp	1,100	Yes	Stephen Moore, Steator
432	Drainage District No. 2 of Wallace Twp	5,800	..do	Nicholas Million, Ottawa
433	Freedom, Wallace, Dayton Special Drainage District	2,400	Yes	R. D. Mills, Attorney, Ottawa
434	Union Drainage District No. 1 of Freedom and Earle townships	8,322	..do	F. E. Kindey, Earleville
435	Union Drainage District No. 1 of Wallace and Waltham townships	7,055	..do	James J. O'Donnell, Ottawa
	LAWRENCE COUNTY			
436	Allison Drainage District No. 1, Allison	7,000	Yes	Joseph Gergardt, Vincennes, Ind
437	Allison Drainage District No. 2, Allison	11,404	..do	Davis McClary, Vincennes, Ind
438	Ambraw River Drainage District, Bond and Lawrence	9,000	No	C. E. Jones, Pinkstaff
439	Ambraw Levee District, Bond and Russell	.....	Yes	John Crews, Lawrenceville
440	Beaver Pond Drainage District, Allison	9,000	..do	C. H. Crews, Lawrencecille
441	Birds Drainage District, Bond and Honey Creek	5,200	..do	C. W. Dollahan, Lawrenceville
442	Big Slough Drainage District, Dennison	4,000	..do	Thomas Weare, St. Francisville
443	Eagle Branch Drainage District, Betty	5,000	..do	S. O. Havill, Lawrenceville
444	England Pond Drainage District, Dennison and Allison	.....	..do	Wm. Harvey, Lawrenceville
445	Otter Pond Drainage District of Lawrence, Bond and Russell Townships	.....	..do	Wm. P. Laird, Lawrenceville
446	Russell and Allison Drainage District	28,000	..do	C. M. Venard, Vincennes
447	Union Drainage District No. 1 of Dennison and Lukin townships	2,780	..do	Herman Beechman, St. Francisville
	LEE COUNTY			
448	Brush Grove Drainage District of Lee and Ogle Counties	11,000	Yes	W. E. Heningway, Steward
449	Inlet Swamp Drainage District, Viola, Lee, Center, Bradford, Reynolds, Willow Creek and Otto	30,170	No	B. F. Johnson, Compton
450	Harmon Drainage District No. 1, Harmon	7,240	..do	J. W. Wadsworth, Dixon
451	Maple Grove Drainage District, Amboy	3,000	Yes	F. N. Vaughn, Amboy
452	Union Drainage District No. 1 of Hamilton and Hahnaman Townships, Lee and Whiteside Counties	10,000	..do	James Foley, Harmon
453	Union Drainage District No. 1 of Harmon and Marion Townships	7,200	..do	J. R. McCormick, Harmon
454	Union Drainage District No. 1 of Harmon and Montmorency Townships, Lee and Whiteside Counties	3,400	..do	A. A. McKeel, Harmon
	LIVINGSTON COUNTY			
455	Oliver and Corn Grove Drainage District, Germanville, Fayette and Chatsworth Townships	1,612	Yes	Miles Desire, Chatsworth
	LOGAN COUNTY			
456	Broadwell Special Drainage District No. 1, Broadwell, Elkhart and Mt. Pulaski	2,340	Yes	G. W. Head, Lincoln
457	Lake Fork Special Drainage District, Elkhart and Mt. Pulaski	10,000	..do	S. Neibuler, Lincoln
458	North Branch of Lake Fork Special Drainage District in Logan, Macon and DeWitt Counties	7,000	..do	H. A. Richner, Chestnut

TABLE No. I—*Continued*

No.	Name	Acreage	Completed	Officers
	LOGAN COUNTY—*Concluded*			
459	Prairie Creek Drainage District No. 1, Prairie Creek	5,500	Yes	H. Adolph, San Jose
460	Prairie Creek Drainage District No. 2, Prairie Creek	1,700	..do	J. M. Burke, Lincoln
461	Union Drainage District No. 1 of Chester and East Lincoln Townships	2,000	..do	W. J. Houston, Lincoln
	MACON COUNTY			
462	Drainage District No. 2, Friend's Creek	1,280	Yes	E. Reaser, Argenta
463	Drainage District No. 3, Friend's Creek	1,400	..do	Thomas Barker, Argenta
464	Drainage District No. 4, Friend's Creek	1,600	..do	S. C. McConnell, Decatur
465	Drainage District No. 1, Milan Township	2,240	..do	C. Freeeland, Dalton City
466	Illini Special Drainage District of Macon and Logan Counties	12,344	..do	Charles H. Faith, Warrensberg
467	Quickel Mutual Drainage District, Long Creek	765	..do	Tobias Quickel, Decatur
468	Sauner Chapel Mutual, Milan and Penn	3,760	..do	L. A. Mills, Decatur
469	Stevens Creek Special Drainage District, Whitmore, Friend's Creek and Hickory	7,837	..do	S. L. Kohr, Oreana
470	Union Drainage District No. 1 of Dora and Milan Townships, Macon and Moultrie Counties	588	..do	John Moody, Dalton City
471	Union Drainage District No. 8 of Friend's Creek and Maroa	1,309	..do	W. R. Doak, Argenta
472	Union Drainage District No. 9, of Friend's Creek and Maroa	2,854	..do	J. W. Armstrong, Argenta
473	Union Drainage District No. 1 of Long Creek and Oakley	2,140	..do	C. A. Heckel, Decatur
474	Union Drainage District No. 2 of Long Creek and Oakley	1,420	..do	J. E. Rucker, R. F. D., Decatur
475	Union Drainage District of Stonington and Pleasant View Townships, Christian and Macon Counties	2,000	..do	A. C. Zeigler, Blue Mound
476	Union Drainage District No. 1, Milan and Penn	.....	.....	S. F. Moody, Bethany
477	Union Drainage District No. 1, Miland and Marrowbone	.....	.....	R. G. McReynolds, Bethany
478	Union Drainage District No. 1, Milan and South Macon	.....	.....	Dave Hughes, Macon
	MACOUPIN COUNTY			
479	Chesterfield and Ruyle Union DrainageDist.	1,100	No	T. B. Ruyle, Kemper
480	Corn Nail Union Drainage District, Honey Point	320	Yes	V. A. Roberts, Honey Bend
481	Drainage District No. 5, of Honey Point Township	.....	.....	J. L. Cartwright, Litchfield
482	Drainage District No. 1 of South Otter Twp.	1,800	No	O. B. Conlee, Carlinville
483	Drainage District No. 2 of South Otter Twp.	1,600	..do	Charles E. Denby, Carlinville
484	Huddleston-Meiners Union Drainage Dist.	.....	.....	G. W. Grove, Carlinville
	MADISON COUNTY			
485	Canteen Creek Drainage District	.....	Yes	G. W. Kalbleish, Collinsville
486	Choteau Island Drainage and Levee District, Choteau	1,900	..do	H. Atkins, Granite City
487	East Side Levee and Sanitary District (see St. Clair County)	.....	.....	.....
488	Silver Creek Drainage District, Pin Oak and Hamel	750	No	Joseph L. Schafer, Fruit
489	Venice, Hameoki, Choteau Levee and Drainage District	18,000	Yes	Conrad Rath, Granite City
490	Wood River Drainage and Levee District Wood River	5,000	No	B. Picker, East Alton
	MARION COUNTY			
491	Soper Lake Drainage District (see Fayette County)	.....	.....	.....
492	Wild Cat Levee and Drainage District (see Fayette County)	.....	.....	.....
	MASON COUNTY			
493	Central Special Drainage District, Pennsylvania, Sherman and Craig	18,000	Yes	J. Cunningham, Easton
494	Garden Special Drainage District, Pennsylvania and Forest City	8,520	..do	W. J. Weinhorst, Forest City
495	Havana Drainage District No. 2, Havana	2,907	..do	Perry Prettyman, Havana

TABLE NO. I—*Continued*

No.	Name	Acreage	Completed	Officers
	MASON COUNTY—*Concluded*			
496	Mason and Tazewell County Drainage Dist.	.....	Yes....	John Hapenny, Delavan.....
497	Quiver River Drainage District.....	1,300	..do....	A. M. Stockert, Topeka.....
498	Sangamon River Special Drainage District of Mason, Menard and Cass Counties....	16,000	..do....	T. W. Buckley, Kilbourne.....
	MASSAC COUNTY			
499	Cache River Drainage District of Pope, Massac, Pulaski, Johnson and Union....	67,900	No.....	H. A. Evans, Metropolis.....
	M'HENRY COUNTY			
500	Door Drainage District No. 1, Dorr.....	1,000	Yes....	F. M. Bunker, Woodstock.....
501	Dorr Drainage District No. 2, Dorr.....	120	..do....	H. Langhoff, Woodstock.....
502	Dorr Drainage District No. 3, Dorr.....	1,100	..do....	Oscar Johnson, Woodstock.....
503	Dunham Drainage District, Dunham	.....	.....	J. J. Kennedy, Harvard.....
504	Kishwaukee Special Drainage District.....	2,200	Yes....	W. E. Hann, Crystal Lake.....
505	McHenry Drainage District No. 1.....	800	..do....	John Boyle, West McHenry .....
506	Rush Creek Drainage District, Dunham and Marengo.....	3,916	Yes....	J. E. Cunningham, Marengo.....
507	Seneca Drainage District, Seneca.....	.....	..do....	Henry Young, Union.....
	M'LEAN COUNTY			
508	Cropsey and Lawndale Drainage District..	22,000	Yes....	E. M. Marritt, Saybrook.....
509	Easterbrook Special Drainage Dist. No. 1 .	6,000	..do....	..do.....
510	Gridley Township Drainage District No. 1.	9,000	..do....	W. H. Boies, Gridley.....
511	Kickapoo Drainage District.....	8,000	..do....	Alfred Howe, Bloomington.....
512	Sangamon Drainage District, Arrowsmith Township.....	8,000	..do....	E. M. Merritt, Saybrook.....
	MENARD COUNTY			
513	Oakford Special Drainage District, Twp. 19	3,000	Yes....	E. J. Armstrong, Petersburg.....
514	Salt Creek Special Drainage District of Menard and Mason counties	13,000	..do....	J. H. Dearborn, Mason City .....
	MERCER COUNTY			
515	Bay Island Drainage and Levee District, New Boston and Eliza.....	19,300	Yes....	D. S. Prentiss, New Boston.....
516	Edwards River Drainage District.....	2,800	No.....	Michael O'Day, Presumption.....
517	Keithsburg Drainage District, Keithsburg.	.....	.....	E. Roberts, New Boston.....
518	Richland Grove Drainage District, Richland Grove.....	1,600	Yes....	B. D. Tomlinson, Sherard.....
	MONTGOMERY COUNTY			
519	Harvel Drainage District No. 2, Harvel....	1,882	Yes....	W. W. Adams, Harvel.....
520	Horse Creek Union Drainage District No. 1, Harvel and Bois D'Arc.....	3,200	..do....	J. F. Bennett, Harvel.....
521	Lone Elm Drainage District, Harvel.....	950	..do....	Chris Specht, Harvel.....
522	Raymond Drainage District No. 1, Raymond.....	820	..do....	J. W. Gilbert, Raymond.....
523	Raymond Drainage District No. 2, Raymond.....	.....	.....	C. E. Sipe, Hillsboro.....
524	Raymond Drainage District No. 3, Raymond.....	.....	.....	H. J. Tonsor, Raymond.....
525	Shop Creek Drainage District No. 1, North Litchfield.....	2,000	Yes....	G. W. Fisher, Litchfield.....
526	Union Drainage District No. 1 of Harvel and Pittman.....	1,650	..do....	H. N. Wekkar, Waggonier.....
527	Union Drainage Distric No. 2 of King and Harvel (Christian and Montgomery counties).....	6,800	..do....	E. J. Zimmerman, Harvel.....
528	Union Drainage District of Raymond and Harvel.....	2,000	No.....	Daniel Pope, Harvel.....
	MONROE COUNTY			
529	Columbia Drainage and Levee District....	12,800	Yes....	Fred Louer, Valmeyer.....
530	District No. 1.....	4,820	No.....	Wm. Shorn, Valmeyer.....
531	Harrisonville and Ivy Landing Drainage and Levee District No. 2.....	20,000	Yes....	Bennett James, Waterloo.....
532	Ivy Landing and Fort Chartre Levee District No. 5.....	.....	.....	D. M. Hardy, Waterloo.....
533	Moredock and Ivy Landing Drainage District No. 1.....	15,000	Yes....	John Herbert, Valmeyer.....
534	Stonington and Fort Charter Levee District	.....	.....	D. M. Hardy, Waterloo.....
535	Wilson and Wenkel Levee District, Columbia Township.....	1,500	Yes....	H. N. Kunz, Columbia.....

TABLE No. I—*Continued*

No.	Name	Acreage	Completed	Officers
	MORGAN COUNTY			
536	Clear Creek Drainage and Levee District (see Cass County)	.....	.....	.....
537	Meredosia Lake Drainage and Levee District (see Cass County)	.....	.....	.....
	MOULTRIE COUNTY			
538	Asia Creek Drainage District, Sullivan and East Nelson	800	Yes....	F. E. Ashworth, Sullivan
539	Drainage District No. 1 of East Nelson Twp.	.....	.....	John D. Layton, Allenville
540	Drainage District No. 1, Lowe Township	.....	.....	Henry Asherman, Arthur
541	Drainage District No. 2, Lowe Township	2,878	Yes....	Jacob Steck, Arthur
542	Drainage District No. 4, Lowe Township	2,500	..do....	R. F. Martin, Arthur
543	Drainage District No. 5, Lowe Township	.....	.....	O. L. Howell, Arthur
544	Drainage District No. 7, Lowe Township	300	..do....	C. P. Eberhardt, Arthur
545	Union Drainage District No. 1 of Milan and Dora townships, Mason and Moultrie counties	600	..do....	John Moody, Dalton City
546	Sullivan Drainage District No. 2, Sullivan	2,000	..do....	J. R. Bean, Sullivan
	PEORIA COUNTY			
547	Banner Special Drainage and Levee District of Timber and Banner townships, Peoria and Fulton counties	4,400	No.....	George Houston, Canton
548	Hallock and Medina Drainage District	1,800	Yes....	A. M. Root, Chillicothe
549	Pekin and LaMarsh Drainage and Levee District	2,400	..do....	H. W. Mattison, Pekin
	PIATT COUNTY			
550	Bement Mutual Drainage District No. 1, Bement	2,000	Yes....	Thomas Lamb, Bement
551	Bement Mutual Drainage District No. 2, Bement	800	..do....	C. J. Bear, Monticello
552	Bement Mutual Drainage District No. 3, Bement	1,000	..do....	H. E. Shaw, Bement
553	Cerro Gordo Drainage District No. 5, Cerro Gordo	940	..do....	L. W. Biel, Casner
554	Goose Creek Drainage District No. 1, Goose Creek	4,800	..do....	E. O. Martin, Weldon
555	Goose Creek Drainage District No. 2, Goose Creek	800	..do....	W. H. Perkins, DeLand
556	Goose Creek Drainage District No. 3, Goose Creek	1,736	..do....	H. S. McFadden, DeLand
557	Goose Creek Drainage District No. 4, Goose Creek	1,500	..do....	D. H. Prine, Deland
558	Hammond Mutual Drainage District of Piatt and Moultrie counties	7,000	..do....	J. W. Dick, Hammond
559	Mutual Drainage District of Piatt and Moultrie counties	.....	.....	Jay Ponder, Tuscola
560	Mutual Drainage District No. 4 of Cerro Gordo, Willow Branch and Bement twps.	2,500	Yes....	J. F. Burns, Bement
561	Newcomb Special Drainage District of Champaign and Piatt counties	6,000	No.....	M. O. Stone, Mahomet
562	Union Drainage District No. 1 of Goose Creek	.....	.....	James D. Perkins, Monticello
563	Unity Drainage District No. 4, Unity	.....	.....	A. D. Pierson, Pierson
564	Unity Drainage District No. 2, Unity	.....	.....	Thomas Blackwell
565	Union Drainage District No. 1 of Unity and Lovington townships, Piatt and Moultrie counties	.....	.....	G. W. Traxler, Hammond
	PIKE COUNTY			
566	Boyd Levee and Drainage District of Kinderhook, Barry, Cinewata and Pleasant townships	2,600	Yes....	W. C. Rheinhardt, Kinderhook
567	McGee Creek Levee and Drainage District, Chambersburg	11,500	..do....	O. R. Brooks, Kinderhook
568	Six Mile Drainage District, Pleasant Hill	3,978	..do....	J. T. Berry, Pleasant Hill
569	Sny Island Levee Drainage District of Adams, Pike and Calhoun counties	110,000	No.....	H. B. Atkinson, New Canton
570	Bay Creek Sub-District of Sny Island Levee Drainage District	8,843	Yes....	..do
571	Colliers Pond Sub-District, Sny Island Levee Drainage District	2,610	..do....	..do
572	Sand Slough Sub-District of Sny Island Levee Drainage District	5,108	..do....	..do

TABLE NO. I—*Continued*

No.	Name	Acreage	Completed	Officers
	PULASKI COUNTY			
573	Big Creek Drainage District No. 1	1,440	Yes	A. E. Clemons, Perks
574	Big Creek Drainage District No. 2	5,200	..do..	David Maier, Comock
575	Pulaski Drainage District	4,300	..do..	J. B. Kennedy, Pulaski
576	Cache River Drainage District (see Massac County)			
	PUTNAM COUNTY			
577	Hennepin Drainage and Levee District, Hennepin	3,000	Yes	James McCutcheon, Hennepin
	RANDOLPH COUNTY			
578	Marie Giteau Levee and Drainage District No. 1, Prairie DuRocher	525	Yes	H. I. Barbeau, Prairie DuRocher
	RICHLAND COUNTY			
579	North German Drainage District, German Township			Simon Schneider, Dundas
580	West Decker Drainage District, Decker Township	2,000	Yes	H. F. Diel, Noble
	ROCK ISLAND COUNTY			
581	Drainage District No. 4, Hampton Twp.	1,500	No	Lewis Colegrove, Moline
582	Drury Drainage District, Drury	5,300	Yes	C. Lillibridge, Muscatine, Iowa
583	Union Drainage District No. 1 of Zuma and Hampton Township	3,000	..do..	Sheldon Walker, Port Byron
584	Union Sub-Drainage District No. 1 of Drury township	12,000	..do..	W. Ziegenhorn, Muscatine, Iowa
	SALINE COUNTY			
585	Bankston Special Drainage District, Harrisburg and Brusky	11,000	No	R. N. Pearse, Harrisburg
586	Black Land Special Drainage District	5,700	Yes	F. A. Bourland, Harrisburg
587	Drainage District No. 3 of Harrisburg and Cottage townships	1,800	..do..	John M. Berry, Harrisburg
588	Eldorado Drainage District of E. Eldorado	8,000	..do..	J. H. Scott, Eldorado
589	Middle Fork Special Drainage District			Peter Baker, Harrisburg
590	Rector Special of Saline and Hamilton Counties	1,700	Yes	J. M. Flannigan, Walpole
591	West Harrisburg Drainage District	1,200	..do..	J. W. Shaw, Harrisburg
	SANGAMON COUNTY			
592	Willow Creek Union Drainage Dist. No. 1			W. H. Garvey, Illiopolis
	SCHUYLER COUNTY			
593	Big Lake Drainage and Levee District	3,522	Yes	Warren R. Leach, Jacksonville
594	Coal Creek Drainage and Levee District of Frederick and Bainbridge	6,719	..do..	Guy L. Shaw, Beardstown
595	Crane Creek Drainage and Levee District	5,578	..do..	H. V. Teel, Rushville
	SCOTT COUNTY			
596	Big Swan Levee and Drainage District	12,600	Yes	James M. Brown, Winchester
597	Hillview Drainage and Levee District (see Greene County)			
598	Scott County Drainage District			H. J. Marsh, Bluffs
	SHELBY COUNTY			
599	Drainage District No. 1 of Ash Grove Twp.	1,348	Yes	C. A. Curry, Windsor
600	Drainage District No. 1 of Okaw Township	2,700	..do..	J. A. Scrogin, Findlay
601	Drainage District No. 1 of Holland Twp.	680	..do..	Victor Elbert, Mode
602	Drainage District No. 1 of Pickaway Twp.	1,200	..do..	V. B. Cruitt, Findlay
603	Union Drainage District No. 1 of Flat Branch and Assumption	1,400	..do..	James Osborne, Assumption
604	Union Drainage District No. 1 of Todds Point and Okaw	2,453	..do..	V. B. Cruitt, Findlay
	ST. CLAIR COUNTY			
605	East Side Levee and Sanitary District of St. Clair and Madison counties	55,000	No	C. L. Gray, East St. Louis
606	Prairie DuPont Drainage and Levee District of Sugar Loaf Township	6,000	Yes	Adam Karr, Belleville
607	Richland Creek Drainage District	2,000	..do..	L. A. Miller, Belleville
608	Drainage District No. 1	26,500	..do..	F. B. Harding, East St. Louis
	TAZEWELL COUNTY			
609	East Peoria Drainage and Levee District of Fondulac Township			Horace Clark, Peoria

TABLE NO. I—*Continued*

No.	Name	Acreage	Completed	Officers
	TAZEWELL COUNTY—*Concluded*			
610	Hickory Grove Drainage and Levee Dist. of Spring Lake Township and Sand Prairie			E. E. Ethel Manito
611	Sand Prairie Drainage District No. 1	1,800	Yes	C. E. Schuman, Green Valley
612	Spring Lake Drainage and Levee District of Spring Lake Township		do	H. J. Puterbaugh, Mackinaw
	UNION COUNTY			
613	Clear Creek Drainage and Levee District of Union and Alexander Counties	39,960	No	S. F. Davis, Jonesboro
	VERMILION COUNTY			
614	Fairview Special Drainage District, Township No. 18	6,000	Yes	Richard Puzey, Catlin
615	Fayette Drainage District No. 1			W. B. Russel, Catlin
616	Grant Township Drainage District No. 1	6,400	Yes	N. J. Smith, Hoopeston
617	Hoopeston Drainage District, Grant Twp.	6,000	do	Scott Ingle, Hoopeston
618	Newell and Ross Drainage District No. 1	3,600	do	S. R. Watson, Alvin
	WABASH COUNTY			
619	Drainage District No. 1		do	John Collins, Keensburg
620	Drainage District No. 2		do	George Schafer, Keensburg
621	Drainage District No. 3		do	C. Boesacker, Mt. Carmel
622	Drainage District No. 4	2,400	Yes	Ransom Higgins, Allendale
623	Drainage District No. 5	940	do	W. Ewald, Mt. Carmel
624	Drainage District No. 6	1,500	do	L. F. Putnam, Brown
625	Drainage District No. 7	1,500	do	Andrew Pool, Mt. Carmel
626	Drainage District No. 8	1,400	do	F. E. Gilkinson, Bellmont
627	Drainage District No. 9	1,200	do	Joe Legur, Keensburg
628	Drainage District No. 10	2,400	do	U. G. Grundon, Mt. Carmel
629	Drainage District No. 11	1,000	do	J. B. Smith, Friendsville
630	Drainage District No. 13	980	do	W. P. Haberton, Mt. Carmel
631	Drainage District No. 14	665	do	Earl Gard, West Salem
632	Drainage District No. 15	356	do	H. L. Ronald, Grayville
633	Drainage District No. 16, Special	700	do	W. A. Milburn, Mt. Carmel
	WAYNE COUNTY			
634	Aurier Creek Special of Hamilton and Wayne counties	3,400	Yes	C. F. Maulding, Wayne City
635	Big Mound Drainage District No. 1	10,000	do	A. Rinad, Fairfield
636	Borah Drainage District, Massilon, Jasper and Elm River townships	11,000	do	J. R. Crews, Fairfield
637	Elm River Drainage District, Elm River	1,900	do	L. K. Secrest, Cisne
638	Golden Gate Drainage District			E. L. Apple, Golden Gate
639	Mourtray Slough Drainage District of Mt. Erie Township	2,500	No	Ed. Mills, Mt. Erie
640	Seech and Grover Drainage District, Grover and Seech	10,000	Yes	E. W. Black, Fairfield
641	Union Drainage District No. 1 of Mt. Erie and Massilon townships	11,400	No	John W. Allison, Mt. Erie
642	Union Drainage District No. 1 of Seech and Massilon Townships	5,000	No	Frank Gillard, Albion
643	Wayne City Drainage District, Orela Big Mound Township	17,000	do	W. M. Goudy, Fairfield
644	Wood Drainage District of Wayne and White counties	5,500	Yes	W. A. Edwards, Burnt Prairie
	WHITE COUNTY			
645	Drainage District No. 3 of Emma Twp.	5,480	No	J. P. Schumacher, Munee
656	Drainage District No. 4 of Emma Twp.	2,050	Yes	J. F. Harrison, Emma
647	Drainage District No. 5 of Emma Twp.	1,200	No	G. D. Aldridge, Carmi
648	Drainage District No. 6 of Emma Twp.	900	Yes	J. C. McCollister, Maunie
649	Drainage District No. 7 of Emma Twp.	1,200	No	Sherman McMurtry, Carmi
650	Drainage District No. 2, Hawthorne Twp.	2,088	Yes	F. Rosen, Sr., Maunie
651	Fox River Drainage District No. 1 of Phillips Township	1,280	do	Joseph Rice, Calvin
652	Half Moon Drainage District of Hawthorne Drainage District	1,270	do	A. D. Mokler, Carmi
653	Mud Creek Drainage District No. 4	1,300	do	Wm. H. Garrett, Springerton
654	Partridge Drainage District No. 1	1,940	No	S. McMurtry, Carmi
655	Randolph Drainage District			John Burroughs, Grayville
	WILL COUNTY			
656	Claypool Drainage District, Goose Lake			J. Neal Dudgeon, Morris
657	Drainage District No. 5 of Monee Twp.			H. Kuerstu, Monee
658	Drainage District No. 2 of Washington			Fred Haseman, Beecher

TABLE No. I—*Concluded*

No.	Name	Acreage	Completed	Officers
	WILL COUNTY— *Concluded*			
659	Drainage District No. 3 of Washington	.....	.....	Charles Haack, Beecher
660	Eagle Lake Drainage District No. 1 of Washington	1,000	Yes	H. F. Bahlman, Beecher
661	Gilkerson and Adams Drainage Dist. No. 2.	364	..do	J. C. Adams, Peotone
662	Union Drainage District No. 1 of Peotone and Manteno	670	..do	John Croxen, Peotone
663	Union Drainage District No. 1 of Monee and Will	1,319	..do	John Becker, Monee
664	Union Drainage District of Peotone	.....	.....	Charles Truby, Peotone
	WINNEBAGO COUNTY			
665	Kishwaukee Drainage District, New Wilford and Scott, Winnebago and Ogle Counties	12,000	Yes	O. E. Davis, Paris Junction
	WHITESIDE COUNTY			
666	Albany and Meredosia Drainage and Levee District	.....	.....	Charles Olds, Albany
667	Cattail Drainage District, Fulton Twp	.....	.....	John Kolk, Fulton
668	Drainage District No. 1 of Hahnaman Twp.	8,075	Yes	A. W. Keefe, Deer Grove
669	Drainage District No. 2 of Hahnaman Twp.	.....	.....	John Murphy, Deer Grove
670	Drainage Dist. No. 3 of Montmorency Twp.	2,500	Yes	John McNeil, Rock Falls
671	Enterprise Drainage District	3,000	No	O. A. Oliver, Morrison
672	Johnson Creek Levee and Drainage District, York and Fulton townships, White and Carroll counties	3,000	Yes	S. C. Carpenter, Thomson
673	Tampico and Hahnaman Drainage District No. 1	.....	.....	Owen Graham, Tampico
674	Union Drainage District No. 1 of Erie and Fenton	12,000	Yes	G. A. Potter, Erie
675	Union Drainage District No. 1 of Hamilton and Hahnaman	10,000	..do	James Foley, Harmon
676	Union Drainage District No. 1 of Hume and Prophetstown	2,500	No	Arthur McKenzie, Sterling
677	Union Special Drainage District No. 1 of Montmorency	.....	.....	Maurice Murphy, Rock Falls
678	Union Drainage District No. 2 of Montmorency and Coloma	2,520	Yes	W. A. Early, Rock Falls
679	Union Drainage District No. 5 of Montmorency and Coloma	1,800	..do	C. Brandt, Rock Falls
680	Union Special Drainage District of Tampico, Prophetstown and Hume	45,000	..do	C. R. Aldrich, Tampico
681	Union Special Drainage District of Whiteside and Henry counties	.....	.....	John Miller, Prophetstown
682	Whiteside and Rock Island Special Drainage District	18,000	Yes	G. H. Mason, Erie
	WOODFORD COUNTY			
683	Partridge Drainage and Levee District, Partridge Township	3,000	No	Daniel Kelly, Chillicothe

TABLE No. II

County	Number of districts	Total area	Miles of tile	Miles of open ditch	Miles levee	Total assessments
Adams	2	25,476	.....	15	20	$683,698
Alexander	3	14,273	7	17	23	*207,000
Boone	2	2,000	12	5	.....	10,000
Bureau	8	71,500	255	120	.....	282,500
Carroll	1	3,100	.....	4	4	27,000
Cass	5	19,218	1	19	12	226,787
Champaign	30	495,313	273	202	.....	741,028
Christian	80	†57,113	352	197	.....	763,200
Clark	5	10,418	10	15	.....	45,383
Clay	1	3,000	.....	20	.....	30,000
Clinton	2	6,430	2	15	8¼	40,000
Cook	10	16,406	4	39½	.....	158,817

TABLE No. II—*Concluded*

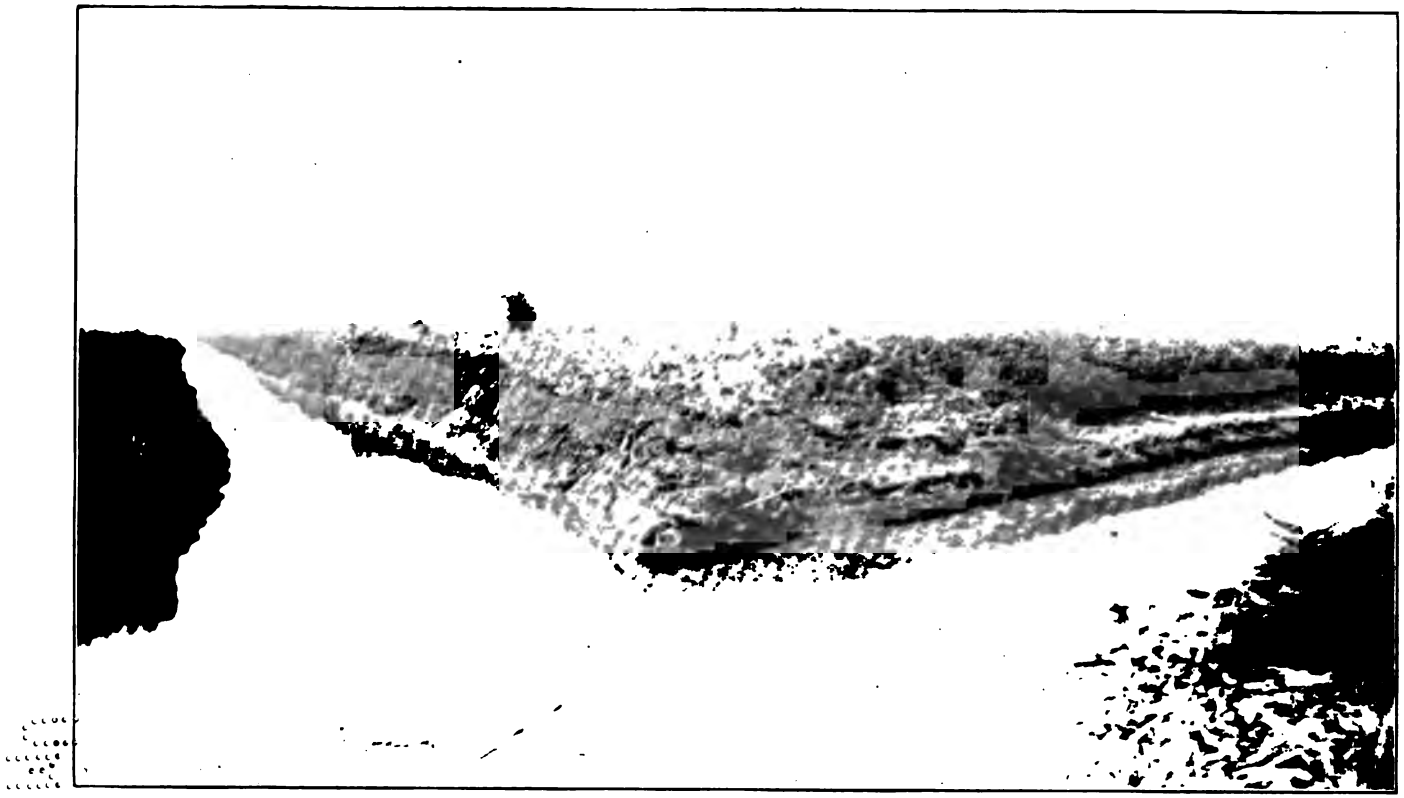
County	Number of districts	Total area	Miles of tile	Miles of open ditch	Miles levee	Total assessments
Coles	7	13,104	24	19½	.....	45,000
Crawford	2	10,000	1	14½	.....	40,600
Cumberland	6	6,698	4	6½	.....	8,025
DeKalb	6	32,640	14½	41½	.....	135,575
DeWitt	6	55,000	37½	16	.....	735,377
Douglas	14	33,432	38	26	.....	139,793
DuPage	5	3,484	13	.....	.....	33,543
Edgar	12	36,451	27	22	.....	204,135
Edwards	1	1,558	.....	4	.....	4,680
Fayette	11	33,454	27½	57	22	288,580
Ford	7	104,060	37	94	.....	176,000
Fulton	2	5,136	126	10	7¼	281,300
Gallatin	4	23,790	2½	27	.....	58,200
Greene	4	40,692	159	45½	680	1,124,000
Hamilton	2	51,000	.....	64	.....	280,000
Hancock	1	16,000	.....	.....	10½	178,200
Henderson	2	15,400	.....	.....	.....	350,000
Henry	6	33,975	23½	75	.....	236,500
Iroquois	23	161,778	5,251	206	.....	869,911
Jackson	5	54,739	.....	52	32	284,997
Jasper	2	8,675	.....	5½	.....	15,000
Jersey	1	10,887	.....	10	11	269,000
Johnson	1	6,000	.....	.....	8	21,000
Kane	9	19,939	27	30½	.....	126,231
Kankakee	15	89,207	787	120	14½	282,900
Kendall	3	4,810	6	5	.....	36,880
Lake	5	9,421	8	22	.....	78,200
LaSalle	8	31,447	100	32	.....	121,897
Lawrence	9	82,384	3	83	38	331,832
Lee	6	86,012	27	111	.....	584,799
Livingstone	1	1,612	6	7	.....	40,000
Logan	6	28,540	22½	33½	36	190,000
Macon	14	41,619	61½	43	.....	188,000
Macoupin	4	4,820	5	17	.....	25,380
Madison	4	25,650	5	3	26	383,600
Mason	5	46,727	.....	92½	30	375,530
Massac	1	68,000	.....	20	6	179,544
McHenry	6	9,136	10	28½	.....	73,265
McLean	5	53,000	2	51½	.....	91,433
Menard	2	16,000	.....	14	22	144,336
Mercer	3	23,700	.....	34	14	231,600
Montgomery	8	19,302	34	26	.....	130,150
Monroe	5	54,120	.....	73	60	813,000
Moultrie	6	9,078	6	7½	.....	74,074
Peoria	3	3,600	26	5	9	$125,000
Piatt	11	29,076	24½	15½	.....	76,000
Pike	7	121,500	22	108	82	586,000
Pulaski	3	10,940	1	33	.....	42,566
Putnam	1	3,000	.....	6	5	72,500
Randolph	1	525	.....	5	.....	11,000
Richland	1	2,000	.....	3	.....	16,598
Rock Island	4	21,800	1½	40½	10	125,000
Saline	6	29,400	1	52½	.....	102,112
Schuyler	3	15,819	111½	33	24½	454,044
Scott	1	12,600	.....	21	14	252,000
Shelby	6	9,981	17½	8½	.....	51,856
St. Clair	4	89,500	.....	49	43	1,882,116
Tazewell	1	1,800	½	5	.....	17,000
Union	1	39,600	.....	26	36	330,000
Vermilion	4	22,000	27½	17½	.....	142,300
Wabash	6	6,321	3	20	.....	50,150
Wayne	10	77,700	1	159½	2	376,764
White	10	17,708	30	38	2½	89,596
Will	4	3,353	4½	10	.....	29,065
Winnebago	1	13,000	7	8½	.....	24,000
Whiteside	12	116,717	5	126	3½	511,530
Woodford	1	3,000	.....	5	5	132,000
Total	505	2,857,664	8,095	3,118½	1,322	$19,306,677

* Acres not included, 3,750.
† Area of twenty-nine only.
‡ For 54,700 acres only.
§ Excluding levees.

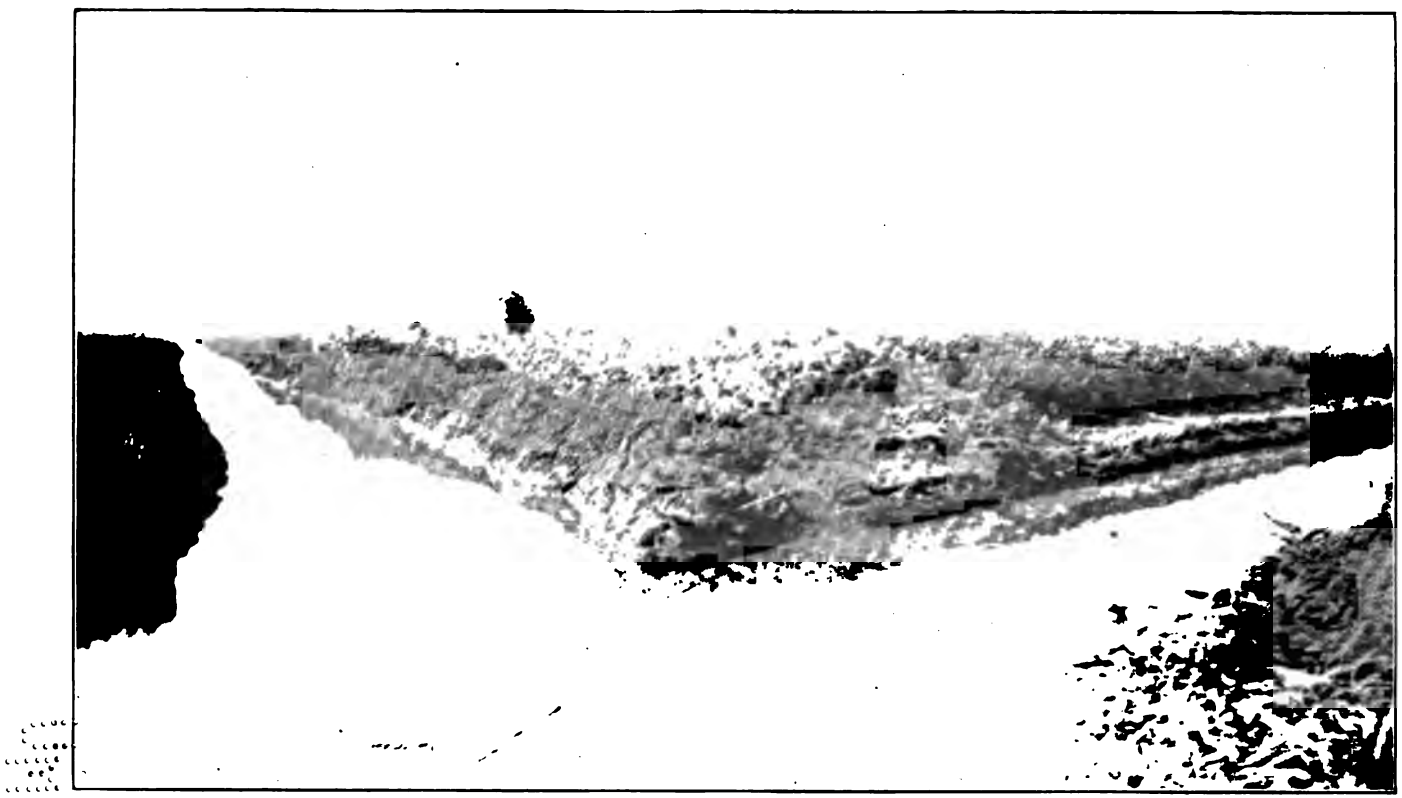
The organization and conduct of a drainage district under the existing laws of this State often involve much confusion and excessive legal expenses.

PLATE XVI

Drainage ditch; Coal Creek district

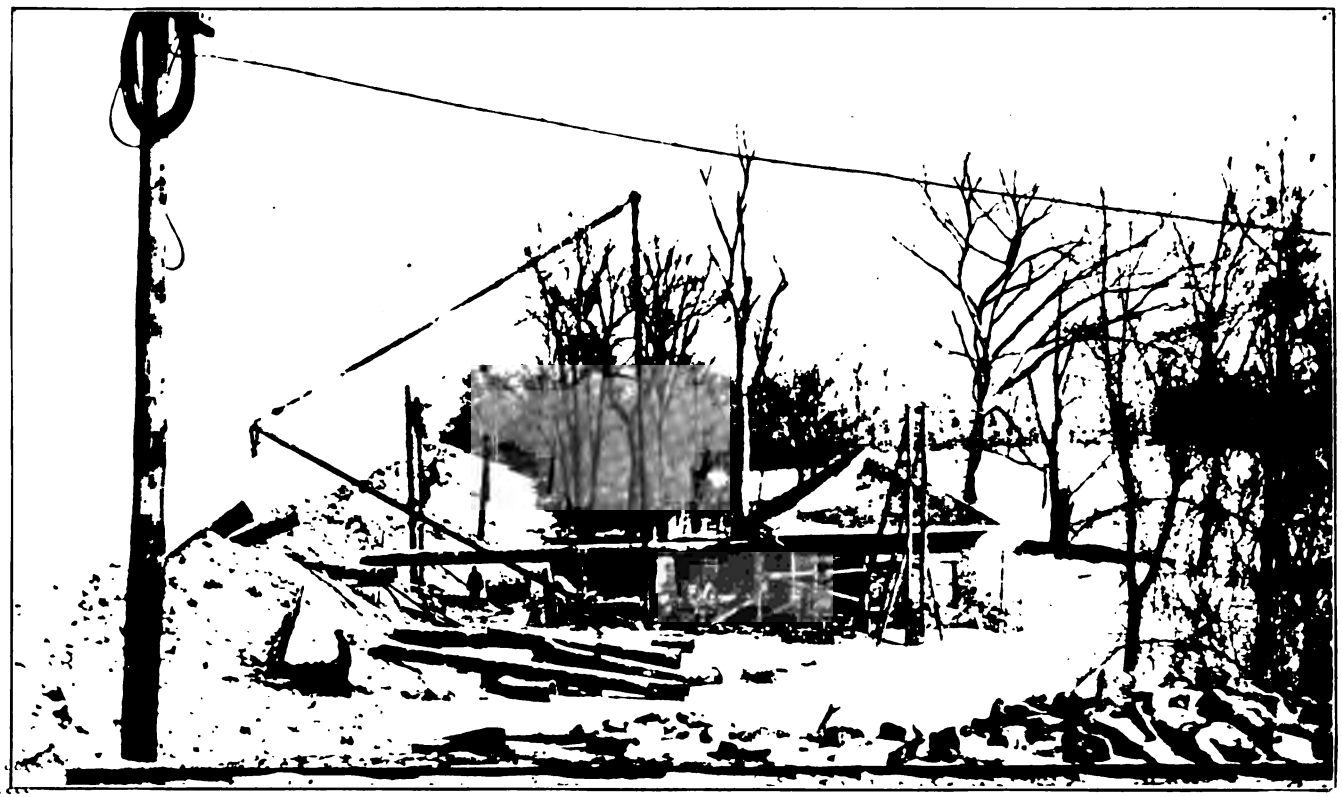


Lateral and main ditch; Coal Creek district



Lateral and main ditch; Coal Creek district

East Peoria district; before completion



Construction work in a drainage district

PLATE XX

Pumping plant; Bay Island district

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This is evident from the text of the many replies received to Question No. 39 listed above. The need of many different reforms was urged by drainage engineers, attorneys and commissioners. The following suggestions are selected from those most frequently submitted:

The most frequent complaint was against the present system of classifying land for assessment by jury, with the charge that juries are often not sufficiently acquainted with the benefits to be derived to enable them to give a fair calssification. It is urged that classification be made by a board of disinterested experts to be appointed by a judge of a court.

Others state that under existing legislation it is possible for the opponent of a district to throw it into court on some trivial cause, often delaying work for years and resulting in excessive legal charges. Cases were cited where the legal expenses of a finally completed district actually exceeded the expenses of construction.

Under the Act in force July 1, 1889, it is provided that any drainage district may be dissolved by petition of four-fifths of the land owners, representing three-fourths of the acreage in the district. The expressed opinion of many interested in drainage matters is that the requirement of four-fifths of the land owners is excessive, as it enables a small minority to oppose the wishes of those representing by far the greater portion of the district. An example was given where four land owners are successfully opposing the wish of fourteen others to dissolve the district.

The declaration by the Supreme Court that Section 40½ of the Act of 1885, permitting drainage commissioners to collect the cost of bridges and culverts from the Road and Bridge Tax Fund, or from railroads, is unconstitutional, leaves the commissioners powerless to recover the expenses of such items. Several complaints were received in this matter.

A suggestion made by two different commissioners is that the requirement, under the law providing for the organization of special drainage districts that the annual meeting be held on the third Tuesday of November is unwise. In country districts the roads at that time of year are often in such condition as to render long drives a hardship and thus prevent a full vote.

A great many complaints were received against the existence of two district drainage laws, the Act of 1879 and the Act of 1885. It was charged that these are conflicting in many details and have led to great confusion. Many remedies have been suggested, ranging from the repealing and recasting of the entire laws to revision by a board of experts. The concensus of opinion, as expressed, is that it would be better to have the two now existing laws recast into one of simpler form, which would make it possible to organize and conduct a drainage district, where the need for such exists, and to carry it through without the excessive delay, litigation and legal expenses so often involved under our present laws.

Some of the above suggestions are of minor importance, but all indicate that imperfections exist in the machinery of our present drainage laws which should, in the proper order of things, be remedied.

The drainage laws of this State should be turned over to a body of experts on this subject for careful study, and they should be revised or extended wherever conflicting or lacking in nature. Legislation should be drafted which will permit the organization of drainage districts to include all of the lands subject to reclamation in any of our river bottoms and provide the means for their proper conduct along lines to follow the policy well established in this State, that all improvements of local nature shall be made by assessment or tax used upon the benefits derived.

These are the principal demands of drainage today and they have been voiced by resolutions at practically every recent conference of those interested in drainage matters. Model laws have been drafted in efforts to assist and encourage the desired legislation. Among these may be mentioned those developed by committees representing the National Drainage Congress, the Illinois Society of Engineers and Surveyors, and the Association of Drainage and Levee Districts of Illinois. These are all steps directed along the proper line. They indicate the need and should assist in obtaining the remedy.

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